



# REPORT

ON THE

State of Public Health in Burma

*During 1948*



RANGOON

SUPDT., GOVT. PRINTING AND STATIONERY, BURMA

1950

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REPORT  
ON THE  
State of Public Health in Burma  
*During 1948*



RANGOON  
SUPDT., GOVT. PRINTING AND STATIONERY, BURMA  
1950







# RESOLUTION

ON THE

## Annual Report on the State of Public Health in Burma

During the year 1948.

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Extract from the Proceedings of the Government of the Union of Burma,  
Ministry of Health and Local Government No. 30SD(X)50, dated the 13th  
November 1950.

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READ—The Annual Report on the State of Public Health in Burma during the year  
1948.

RESOLVED—The Report be published.

By order,

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*Ministry of Health and Local Government.*



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### During 1948.

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#### CHAPTER I.

#### Introduction.

[Owing to insurgent activities and the unsettled conditions prevailing in the country, annual public health reports of 32 towns only have been received. As such vital statistics figures of these towns together with those compiled from the available monthly returns of 21 other towns have been shown in the statements. The figures for the remaining 17 towns could not, however, be included as monthly returns have not been received for all the months of the year.]

Calculations have been based on the population figures of the 1931 census.]

**Rainfall.**—A short account of the rainfall in Burma during the period of May to October 1948, received from the Director, Meteorological Department, is furnished below :—

##### *I. Onset of Monsoon.*

The South-West monsoon set in in the month of May in Tenasserim and North Burma Districts by about the end of the first week, in the Delta and the Kachin State by about the beginning of the second week, in Arakan by about the middle of the second week, and in the Dry Zone and the Shan States by about the end of the same week. The monsoon was fully established in the whole country by about the end of the third week.

##### *II. The Intensities of Monsoon in the Divisions and Actual Percentage Departures from Normals.*

**May.**—Under the influence of a cyclonic depression occurring in the Bay of Bengal from 16th to 18th, heavy rains fell in the Delta and Arakan divisions. The heaviest rainfalls recorded during the month as a result of this depression were :—7'90" at Moulmeingyun (Delta) on the 16th and 7'40" at Cheduba (Arakan) on the 19th.

Monsoon was fairly active in Arakan and the Delta where the total amounts of rainfall were respectively 20 per cent and 22 per cent in excess of the normals. It was practically normal in the Dry Zone and North Burma Districts. It was just active in Tenasserim and the Southern Shan States where the total amounts of rainfall exceeded the

normals by 13 per cent and 16 per cent respectively. It was, however, vigorous in the Kachin State where the total amount was 78 per cent in excess of the normal.

*June.*—The occurrence of a deep depression in the Northwest Bay of Bengal caused heavy rainfalls in Arakan and the Delta on the 25th and 26th of the month.

The heaviest rainfalls that followed the wake of this depression were :—10·29" recorded at Sandoway (Arakan) on the 28th and 7·90" recorded at Moulmeingyun (Delta) on the 27th.

Monsoon was just active in Arakan and Tenasserim where the total amounts of rainfall were respectively 14 per cent and 13 per cent above the normals ; it was weak in the Delta, and normal in the Kachin State, the total amounts of rainfall being in defect by 9 per cent and 3 per cent respectively of the normals. It was also weak in the Dry Zone and the Southern Shan States where the total amounts of rainfall were respectively 24 per cent and 23 per cent in defect of the normal amounts. It was very weak in the North Burma Districts and the total amount of rainfall was 42 per cent in defect of the normal.

*July.*—On the 27th and 28th of the month, a cyclonic depression of moderate intensity occurred in the Northwest Bay of Bengal and under its influence, heavy rainfalls occurred in Arakan and in the Kachin States. The heaviest rainfalls that occurred in the wake of this depression were :—7·89" and 7·32", recorded at Sadôn and Htaw-gaw (Kachin State) respectively on the 31st and 6·46" recorded at Akyab on the 29th.

Monsoon was normal in Arakan, in the Delta and in the Dry Zone. It remained very weak in the North Burma Districts where the total amount of rainfall was 46 per cent in defect of the normal. It was however, moderate in the Kachin State with the total amount of rainfall 24 per cent in excess of the normal.

*August.*—During the month, a deep depression occurred in the West Central Bay, lasting from the 12th to 15th, and causing heavy rainfalls in Arakan and in the Delta. A week later another depression of moderate intensity occurred in the Northwest Bay lasting about four days. Under its influence, heavy rainfalls occurred in the Delta, in Arakan and in the adjoining Dry Zone.

The heaviest rainfalls recorded during the month were :—11·66" at Akyab on the 17th, 6·08" at Thabaung (Delta) on the 18th, 7·24" 6·47" and 6·50" at Kyauktaga (Delta), Kyaukpyu (Arakan) and Sedaw (Dry Zone) respectively on the 26th.

Monsoon was just active in Arakan where the rainfall was 15 per cent above normal and weak in the Dry Zone with the total amount of rainfall 12 per cent below normal. It became normal in the North Burma Districts and in Kachin State, moderate in the Delta, in



Tenasserim and in the Southern Shan States with the rainfalls 32 per cent, 26 per cent and 33 per cent above normal respectively.

*September.*—The occurrence of a weak depression in the South Central Bay of Bengal in the third week of the month just helped to activate the monsoon in Tenasserim and the Delta.

The heaviest rainfalls recorded during the month were :—6'17" at Akyab on the 14th and 4'81" at Thayetchaung (Tenasserim) on the 15th.

Monsoon was just active in Tenasserim and the Delta with the amounts of rainfall 11 per cent and 16 per cent above normal respectively, moderate in the North Burma Districts with the amount of rainfall 28 per cent above normal, and normal in Arakan, in the Kachin State and in Southern Shan States.

*October.*—A deep depression occurred on the 5th of the month in North Andaman Sea, and intensified into a cyclonic storm, which moved Northwest into South Central Bay and then recurved towards North. It crossed Arakan coast about thirty miles south of Akyab on the 8th at about 3 a.m. It moved further eastwards and dissipated near Southern Shan States. In the course of this cyclone, heavy rainfalls occurred in Arakan, in the Dry Zone, in Southern Shan States and in Pegu Division. According to Newspaper reports, as a result of these heavy rainfalls, heavy floods occurred in Sinbyugyun, in Minbu, Kyauksè, and Yamèthin Districts, and in the Southern area in Pegu Division. The damage caused by the floods to crops and habitations alone was estimated to be over a hundred lakhs of Rupees. Newspapers also reported loss of human lives, poultry and cattle, and serious breaches in canals and railway lines.

The heaviest rainfalls recorded during the month were :—10'25" at Ramree (Arakan) and 6'69" at Mezali (Dry Zone) on the 8th 7'41" at An (Arakan) on the 7th and 3'62" at Taunggyi (Southern Shan States) on the 9th. This amount of rainfall at Taunggyi was the heaviest, recorded in the Southern Shan States during the period under report.

Apart from the heavy rainfalls due to this depression, monsoon was vigorous in Arakan and in the Dry Zone, the total amounts of rainfalls being 98 per cent and 75 above normal respectively. It was strong in the Delta, the amount of rainfall being 49 per cent above normal, and normal in Tenasserim. It was moderate in the Kachin State, in the North Burma Districts and in Southern Shan States, the total amounts of rainfall being 27 per cent, 23 per cent and 25 per cent above normal respectively.

### *III. Withdrawal of Monsoon.*

Monsoon began to withdraw in the Kachin State and North Burma Districts in the first week of October, in Arakan, the Dry Zone, the Shan States and the Delta about the end of the second week, and in Tenasserim about the beginning of the third week.

*IV. Actual Departure and Percentage Departure of the Total Rainfalls from the Normals by Division for the year 1948.*

<i>Divisions.</i>	<i>Actual Departure (inches and cents).</i>	<i>Percentage Departure.</i>
		<i>Per cent.</i>
Arakan ...	+ 200·85	+ 15
Delta ...	+ 542·79	+ 15
Tenasserim ...	+ 207·39	+ 6
Kachin State ...	+ 58·91	+ 9
Southern Shan States.	+ 30·94	+ 19
Northern Burma Districts.	- 26·00	- 4
Dry Zone ...	- 97·84	- 8

**Economic Conditions.**—The Commissioner of Settlements and Land Records stated that he was not in a position to compile an authoritative account of the economic conditions in Burma during the year 1948 as applicable to the whole of the population in Burma. But from the reports received from the District Health Officers it was known that the unsatisfactory relations between landlords and tenants remained unchanged and attempts to reduce the high rates of the most essential commodities including the staple food—rice as far as practicable showed no appreciable result due to frequent breakdowns of transport and communications.

## CHAPTER II.

### Commentary on Vital Statistics.

**Population.**—The population of Burma according to 1931 census was 14,657,006. A perusal of the main vital statistics statements will, however, show that they relate to a population of 1,184,278 only. The reason for this vast difference was that the statistics in the main statements refer to only 53 urban areas of Burma. The statistics of all districts (13,244,245) including those of the nine districts where they are normally considered to be inaccurate had to be left out as the collection of Vital Statistics had not yet been taken up for want of necessary forms and registers. The statistics of 17 towns (203,150) had also not been accounted for as their annual reports were not received and figures could not be compiled from the incomplete monthly returns for these towns. The population of Minbya (2,244) and those of the Cantonments of Rangoon, Mingaladon, Mandalay and



Maymyo (23,089) had also been omitted. The former had not yet been revived as a Municipal area while no cantonments had yet been established during the year.

**Registration and Transmission.**—The Registrars of births and deaths usually the ward headmen or vaccinators, transmit the birth and death foils to the Health Officers of the Municipalities once a week. These statistics are compiled on the prescribed forms and submitted to the office of the Director of Medical and Health Services, Burma, where the final consolidation of all figures is effected.

#### BIRTH AND DEATH RATES.

**Birth Rate (Urban).**—The rate for the year was 37·17. It showed an increase of 3·68 compared with the rate for the year 1947. Twenty-two towns had recorded rates higher than this year's urban mean. The highest rates during the year were recorded in Maymyo 58·97, Myaungmya 57·23, Kamayut 56·92, Pyu 53·29, Taungdwingyi 49·05, Thatôn 48·07, Mandalay 47·05, Kanbe 45·93, Ye-U 45·73, Syriam 45·06, Maubin 44·73, Bassein 43·76, Mônywa 43·52, Kyaukpyu 43·24, Yenangyaung 41·63, Thingangyun 41·46, and Shwebo 40·14.

The high rates recorded in these towns may be attributed to good registration and the increase of population due to the general influx of refugees from the disturbed rural areas.

The towns recording the lowest rates were Chauk 11·07 (9·51) Akyab 12·52 (8·77), Kyangin 16·37 (18·73), Yamèthin 18·19 (20·23).

In Chauk there are more males than females among the population and it is believed that this factor is responsible to some extent for the low birth rate. In Akyab the low birth rate was to a great extent to be attributed to the fact that the town had not yet introduced the bye-laws relating to the registration of births and deaths nor had appointed the full pre-war strength of Registrars to strictly enforce the above bye-laws due to unsettled conditions and lack of funds.

**Death Rate (Urban).**—The urban rate 31·94 showed a drop of 0·90 compared with the rate of 1947.

The mortality from the principal diseases were Pneumonia 3,667, Pulmonary Tuberculosis 1,974 and Other Fevers 1,876. Twenty-four out of 53 towns included in the main statements recorded rates above the current year's urban mean. The highest rates during the year were recorded in Moulmeingyun 60·80 (75·00), Myaungmya 59·37 (61·26), Kamayut 55·54 (69·60), Mônywa 50·28 (45·74), Kanbe 48·21 (54·75), Taungdwingyi 43·53 (46·17), Kyaiklat 43·44 (59·58), Yenangyaung 42·08 (51·36), Pegu 40·92 (40·69) and Wakèma 40·28 (48·62).

The high death rate in Moulmeingyun was principally due to the high incidence of small-pox which took a toll of 54 lives in this town during the year. The corresponding rates for the previous year are



shown in brackets. It will be observed that the rates in the towns of Moulmeingyun, Kamayut, Kanbe, Kyaiklat, Yenangyaung and Wakèma showed an appreciable improvement when compared with the rates for the previous year while in the case of Môngywa, Taungdwingyi and Pegu the rates showed slight increase. The towns returning low death rates were Myitnge 4·75 (5·63), Kyangin 9·88 (16·67), Akyab 12·29 (4·31), Nattalin 12·43 (16·86), Toungoo 13·43 (17·53), Minhla 17·44 (18·58), Chauk 18·63 (26·10), Zigôn 18·85 (29·69), Tavoy 19·43 (22·40), Yamèthin 19·80 (12·38) and Thônzè 19·84 (21·10).

In Myitnge and Chauk a large proportion of the population being employees of the Burma Railways Workshop and B.O.C., Limited were adults in the age period of 25 to 40 among whom mortality rate is generally low. In Akyab the low death rate was due to the same condition that contributed to the low birth rate of the town. The low death rates in Thônzè, Kyangin, Toungoo, Minhla, Zigôn and Tavoy towns were to be attributed to the fact that the towns were either free from epidemic diseases or no serious outbreaks of these occurred in these towns during the year under report. It may be inferred from the low birth rate coupled with the low death rate recorded in Yamèthin town that registration of vital statistics in this town was not up to the mark.

### CHAPTER III.

#### Principal Epidemic Diseases.

##### MAJOR EPIDEMIC DISEASES.

Cholera, Small-pox and Plague are major epidemic diseases in this country. These are so well-known that villagers are able to distinguish them easily and report their incidence to their headmen. The protection of Public health including the prevention of the spread of contagious and infectious diseases among human beings and the improvement of sanitation are the responsibilities of the local bodies both in rural and urban areas. The Health Officers in the towns are in most cases capable of controlling the outbreaks of these diseases but in the case of District Councils and Deputy Commissioner's Local Fund Areas the Medical Officers in charge of hospitals and dispensaries cannot afford to be out on tour for long and hence prophylactic inoculations, disinfections, and preventive measures have to be carried out by the Sub-Assistant Surgeons and three Epidemic Mobile Teams of this Department. During the year the Mobile Teams were detailed to Moulmeingyun, Salin, Pyawbwè and Meiktila and to rural areas of Myaungmya and Minbu.

**Cholera (Urban).—**This disease was not very much prevalent during the year. The death rate was 0·01. It was below the rate of the previous year by 0·04. Eight deaths were recorded as against 71

in 1947. The total number of inoculations performed during the year was 60,586 of which 31,652 were in rural and 28,934 in urban areas. The number of inoculations performed last year was 141,813.

**Small-pox (Urban).**—The death rate from this disease 0·84 was 0·11 more than the rate for 1947.

The highest rates were recorded in Moulmeingyun 6·97, Yamèthin 3·55, Mandalay 3·39, Ye-U 2·13, Shwebo 1·77 and Moulmein 1·66.

In Mandalay there was a total of 832 attacks with 457 deaths. The spread of the disease was partly due to the Burmese *Sesayas* and partly to the persons responsible for the patients, failing to report the occurrence of the disease and refusing segregation either to isolated places or to the Contagious Diseases Hospital for treatment. The Health Staff induced the Burmese *Sesayas* to co-operate with the Health Department for the segregation of the small-pox patients but in vain. They agreed to do so too late to be of any help in controlling the spread. Eight Burmese *Sesayas* were prosecuted for failure to report the occurrence of small-pox cases attended by them. Five of them were convicted and fined. Two cases were withdrawn and one case had to be closed. Eighteen parents or responsible persons were prosecuted for failure to report the occurrence of small-pox cases and for refusing segregation in the Contagious Diseases Hospital, 16 of them were convicted and the fines realized was Rs. 48. One case was acquitted and one case closed.

A severe epidemic of small-pox was prevalent in Moulmein town during the year under report. There were 332 attacks with 109 deaths, against 69 attacks with 12 deaths in 1947. It was a continuation of the outbreak of the previous year. The outbreak started from an imported case at Daingwunkwin quarter, spread towards the south, heavily infecting the population living in the huts of 4th division which includes the Big Bazaar and ultimately infected the whole town. These two places were very congested owing to influx of refugees from the disturbed and unsettled areas and the bomb craters filled up with rubbish and debris in these quarters formed good breeding places for flies which contributed to a large extent towards the spread of the disease.

In January there were 52 attacks with 6 deaths. The epidemic reached its peak in March with 109 attacks and 38 deaths followed in April with 66 attacks and 32 deaths and finally declined in May with 22 attacks and 11 deaths.

Of the 332 attacks including the imported ones, 167 had previous marks of vaccination on their persons. Of the 109 deaths only 35 had previous marks. They however, had attacks of the confluent type of the disease which invariably proved fatal.

The mortality amongst unprotected children and infants and the aged were high. Most of the unprotected children were stated to



have been born outside and subsequently brought into the Municipal area. This was the cause why they were not available for vaccination in time. 131 informal talks about prevention of small-pox were given and 1,200 copies of health pamphlets were distributed. In addition segregation of the patients to the temporary huts at the Contagious Diseases Hospital, disinfection of the houses and the personal effects of the patients and vaccination of the contacts and neighbours were the measures adopted during the epidemic. Of the total of 31,054 (2,348 primary and 28,706 re-vaccinations) operations performed during the year, 27,500 were performed during the months from January to May.

Here again the Burmese *Sesayas* who have pecuniary interests could not be induced to report to the Health Authorities, cases of small-pox which they were attending to. Yet other persons would rather risk prosecution than report their cases to the Health Authorities in order to avoid isolation. Nineteen persons were prosecuted. Of these 13 were fined, 4 were allowed to compound the offence in the municipal office and two cases had to be withdrawn as the parties had left the place.

The other towns which reported large number of deaths from this disease are Rangoon 193, Moulmeingyun 54, Myingyan, 40, Yamèthin 33, Pyinmana 24 and Shwebo 20.

**Plague (0·25).**—This mortality rate showed a drop of 0·05 compared with rate for the year 1947. The highest rates were returned from Salin 7·66, Pyawbwè 2·93, Yamèthin 2·80, Pyinmana 2·60, Kyaiklat 1·41 and Allanmyo 1·20. Thirty towns out of 53 reported incidence of this disease. During the year 59,522 rat-holes were closed down, 356,111 were fumigated and 234,975 rats were killed. In the Rangoon Corporation area 132,534 rats were destroyed.) A strict enforcement of building bye-laws and the bye-laws to regulate the storage of grain in godowns and private houses to check the prevention of rats from living in close proximity with man had to be kept in abeyance on account of the present unsettled condition prevailing in the country.

Plague broke out in Salin town on 6th December 1947. The outbreak was the result of rat mortality in Zema, Kyonbyit, Paungbin and in Kunidaung wards where 42 dead rats were found. Microscopic examinations of splenic smears from rats were positive of *B. Pestis*. Accordingly the following anti-plague measures were carried out.

(1) Number of rat holes cyanogased	...	122
(2) Number of connected holed blocked	...	248
(3) Number of rats emerged dead	...	23
(4) Number of rats destroyed by trapping	...	230
(5) Number of anti-plague inoculations performed	2,673	
(6) Number of houses treated with D.D T.	...	100
(7) Number of health lectures delivered	...	34
(8) Number of patients segregated	...	6



A special gang of three coolies were employed and one cooly was attached to the Rural Public Health Inspector for spraying D.D.T. solution. The No. 2 Epidemic Mobile Team stationed at Mandalay was also directed to proceed to the effected area on epidemic duty.

In Pyinmana town the outbreak of plague first started with an imported case from Thedaw in Meiktila district in the last week of December 1947. The patient, a permanent resident of the town, visited Thedaw on business and returned after a few days' stay with high fever and enlarged glands both at the neck and groin. He died on the second day of his arrival at Pyinmana, in one of the stalls within Bazaar premises. The deceased was one of the dwellers, both day and night, in the bazaar where the sanitation was far from satisfactory.

The Bazaar was too narrow and congested with unauthorized temporary stalls and encroachments both over the drains and passages. The conservancy carts and other workers could hardly get entry into the bazaar to do their duties, such as cleaning, sweeping and removing of garbages. The construction of stalls at random together with the dwelling of stall-holders within their respective stalls, where cooking, bathing and washing were done was wholly responsible for the insanitary condition of the bazaar. The staff employed for the sanitation work both for the town and bazaar was inadequate. Besides, it was an unfortunate fact that the prevailing local condition was not favourable to strictly enforce the Municipal Bye-laws, particularly bazaar bye-laws.

As soon as the outbreak started, mass inoculation was launched promptly and immediately within the bazaar compound. The contacts, neighbours and other stall-holders were inoculated. The general public was also warned by beat of gong to protect themselves from this disease by anti-plague inoculation. Inoculations were performed at the Health Office. The Medical Practitioners in the town, Medical Officers from the Civil Hospital, Burma Railways and 4th Burma Rifle were also supplied with plague vaccine to perform inoculation in their respective centres. Over 6,000 persons were inoculated during the outbreak. The proposal of the local Health Officer to do away with the night dwellers in the bazaar was again put up to the new Committee who considered favourably and night dwelling was stopped and prohibited altogether. The Committee also agreed to the recommendation of the Health Officer and introduced the temporary emergency regulations under section 173 (b) of the Burma Municipal Act.

The bazaar was closed down for two days and thoroughly cleaned, sprayed with D.D.T. solution and all the rat-holes properly cyanogased and closed. The services of the Epidemic Mobile Team No. 4 was utilized in carrying out anti-plague measures at the shops and

residences round about the bazaar, the infected houses and neighbouring ones, picture houses and the *Zat-pwè-yon* and those houses from where rat mortality was reported.

The Health Officer's recommendation to reconstruct all the temporary stalls in the bazaar according to the new plan was accepted by the Committee and this work was started rapidly.

*Yamèthin.*—The outbreak of plague in this town started with two indigenous cases in Shwekugone quarter. The first case had the attack on 25th August 1948 and died on 30th August 1948 while the second got the attack on 26th August 1948 and expired on 1st September 1948. Seven other deaths from this disease was reported in September and 12 and 5 deaths occurred during the months of October and November. In all there were 46 attacks with 26 deaths. 2,089 rats were destroyed and 2,805 houses including granaries were disinfected and 4,640 anti-plague inoculations were performed in this town.

**Measures directed against Epidemic Diseases.**—All the public health personnel have been enjoined to carry out health education by means of lectures, group talks and distribution of pamphlets. During the year Press Notes on Small-pox and Cholera had to be issued as the people are reluctant to submit themselves to vaccination and re-vaccination at proper intervals. Simple instructions such as provision of pure water supplies and efficient disposal of sewage were given in these press notes.

## CHAPTER IV.

### The Principal Diseases, Non-Epidemic in Burma.

**Malaria.**—The number of deaths from this disease recorded in 47 out of 53 towns was 1,892. This year's rate 1'60 showed a decrease of 0'61 compared with the rate for the year 1947. The towns recording the highest death rates from this disease are Wakèma 7'80, Myaungmya 7'06, Pyu 6'66, Taungdwingyi 6'24, Salin 6'01, Moulmeingyun 5'55 and Mônywa 5'37.

At the Independence Day Celebration held at Kyaukpyu, models and posters showing the various stages of mosquito life, sources of breeding places of different types of mosquitoes and various measures adopted by the Malaria Control Unit to suppress the breeding of these pests were displayed. The Officer-in-Charge of Malaria Control Unit at Kyaukpyu reported that the show was much appreciated by those who attended the function.



The Malaria Control Unit at Rangoon was closed at the end of January 1948 while the other at Akyab was disbanded in September 1948. Thus only one unit at Kyaukpyu functioned smoothly and efficiently throughout the year under the supervision of an experienced Officer-in-Charge.

Three million Mapacrine tablets were distributed to indigent persons through the units and touring officers of various departments.

During the year under report 3,406 larvae and 416 adult anopheline mosquitoes received from the units and other places were identified in the laboratory of the Malaria Bureau.

Seventy *Gambusia Affinis* were distributed from the central hatchery maintained at the Harcourt Butler Institute of Public Health, Rangoon.

The Assistant Malariologist gave lectures on Malariology, Parasitology and Medical entomology to students of the Public Health Inspectors training class. In addition he gave two broadcast talks, two lectures, one cinema demonstration and two field demonstrations.

With a view to ascertain whether paddy cultivation is permissible or not, the Assistant Malariologist inspected Government acquired lands adjoining Kyaukpyu town proper. He also visited the Frontier Areas with the Medical Mission Party as one of the members and also accompanied the Paper Factory Survey Party to Saingdin Water Fall in Akyab District. From 23rd December 1948 he was placed on foreign service with the Hydro Electric Survey Board as Medical Officer of the Party.

**Leprosy.**—The number of deaths reported from this disease in 33 out of 53 towns was 185. The largest number of deaths were recorded in Rangoon, Mandalay and Moulmein. This is attributable to the fact that most of the deaths reported in these towns as due to leprosy, occurred in the leper asylums.

The 1931 Census shows that there were 11,127 cases of leprosy in Burma, which gives an incidence rate of 0.76 per thousand<sup>1</sup> of population. This figure is a gross under-estimate as the enumeration was made by persons unskilled in detecting leprosy. Systematic investigations on the incidence of leprosy in several places by the Special Leprosy Officer revealed that the true incidence is about ten times that of the Census figure. Hence it would be reasonable to accept a figure of 111,000 as representing the approximate total number of leprosy patients in Burma. Dr. John Lowe, Leprosy Research Worker, who investigated the problem of leprosy in Burma in 1938, reported that the incidence of leprosy among children was high and that among adult leprosy cases about 50 per cent were of infective type. Calculating on this basis, it would appear that well over 55,000 are infective cases requiring segregation particularly from children who are most susceptible to the disease. Isolation of the infective leprosy patients is the measure which is advocated by all leprosy workers as



the most effective method for controlling the spread of the disease. But in the application of the principle of isolation for large numbers of cases over prolonged periods, there are complicating factors from the point of view of financial and administrative considerations. Under the existing facilities, leprosy institutions such as asylums and colonies can at best, cater for a fraction of the total number of infective cases. Other methods by which the vast majority of leprosy cases can be kept in their homes and villages should therefore, be tried. Infective cases can be isolated in their homes and villages with proper safe-guards such as provision of a separate room, if possible, a detached room for the patient with separate utensils and bedding and protection of children from contact with the patient. To that end the co-operation of social workers and the people themselves in whose interest the work is undertaken, should be enlisted by educative propaganda.

There are four Mission asylums in Burma, *viz.*, Rangoon Leprosy Asylum, Kemmendine, St. John's Leprosy Asylum, Mandalay, Leprosy Home, Mandalay and Leprosy Home, Moulmein, having 340, 345, 205 and 158 inmates respectively. In the Shan States two colonies continued to be run, one by the State at Kengtung with 445 inmates, and the other by the Roman Catholic Mission at Loilem with 182 inmates. All these institutions received contributions from Government and local bodies. On account of the present high cost of living, some difficulty had been experienced by the managing authorities of the institutions for the maintenance of the inmates. In his annual report for 1948, the Superintendent, Leprosy Colony, Kengtung, writes that the widespread scourge of leprosy in Kengtung should be controlled by adopting isolation of the affected persons. Commenting on the working of the Moulmein Municipality for 1947-48, the Commissioner, Tenasserim Division, remarks that leprosy is spreading in Moulmein town for all cases cannot possibly be segregated at the local leprosy Home which accommodates about 150, and that the segregation in a leprosy Colony would be an ideal to be devoutly wished for. The voluntary District Leprosy Associations at Insein, Shwebo, Yamèthin, Minbu and Mônywa have taken action to revive the colonies which were destroyed during the war. A new association was formed at Nyaung-U during the year. The new colony at Thatôn which was started in 1946, continued its good work for housing, isolation and treatment of 66 patients of which 40 remained at the end of the year. The colony at Satthadaw in Insein District was revived with 12 inmates during the year. For construction of colonies, the Burma Tuberculosis and Leprosy Relief Association, Rangoon, contributed Rs. 5,000 each to the Associations at Shwebo and Insein, Rs. 6,000 to the Association at Mônywa and Rs. 2,000 to the Association at Thatôn. To provide facilities for the rehabilitation of the leprosy colony at Satthadaw in Insein District, the Leprosy Clinic Van was placed under the charge of the



Assistant District Health Officer, Insein. Clinics for giving free treatment to both indoor and outdoor leprosy patients are attached to all the asylums and colonies. A few civil hospitals also have attached leprosy clinics for giving free treatment to outdoor patients.

In addition to his visits to Kyaukpadaung and Pagan Townships for leprosy survey, the Special Leprosy Officer visited Môngywa, Kani, Pakôkku, Minbu, Thatôn and Insein for propaganda work and for advising local associations and authorities regarding the rehabilitation of leprosy colonies. As representative of the Government, the Special Leprosy Officer, attended the All-India Leprosy Workers' Conference held at Calcutta in December 1948. The newer drugs for the treatment of leprosy, *viz.*, Promin and Sulphetrone were given clinical trials at the leprosy asylum at Kemmendine and the results obtained with these drugs were encouraging enough for the pursuit of further investigations. Two pamphlets and three posters dealing with the nature, mode of spread, and method of prevention of leprosy were prepared and distributed to the public.

**Fevers (3·48).**—The death rate from fevers had shown a drop of 1·13 compared with the rate of 1947. This group of diseases caused 4,126 deaths which constitute 10·90 per cent of the total urban mortality. Of the total fever deaths 1,892 were ascribed to malaria, 300 to enteric, 20 each to measles and cerebrospinal meningitis, 8 to typhus, 2 each to influenza and Black water fever, 6 to Kala Azar and the balance of 1,876 to other fevers.

**Enteric Fever.**—The disease is notifiable in all urban areas, but correct record of its incidence during the year was not available. The number of cases reported by private medical practitioners were few and the diagnosis of the cases admitted into hospitals was more often based on clinical symptoms than on bacteriological investigations. The mortality figures also could not be taken as accurate as the Medical Registrar had in most cases to rely on the history given by the relatives of dead persons and on the examination of dead bodies. Under the circumstances the figures of death shown under this head should be taken to indicate the relative prevalence of the disease. During the year 300 deaths were recorded in 31 towns from this cause and the rate 0·25 was 0·05 lower than the rate for previous year. The highest rates during the year were reported from Taungdwingyi 2·40, Moulmein 1·02, Bassein 0·50, Wakema 0·43, Sagaing 0·42, Pegu 0·37, Myaungmya 0·25, Kyaukpyu 0·24 and Akyab 0·21.

**Dysentery and Diarrhoea.**—This group of diseases accounted for 1,415 deaths and the death rate 1·19 was 0·09 less than the rates for the previous year. The towns recording high death rates from dysentery were Myaungmya 2·52, Kyaiklat 2·35, Moulmeingyun 1·42, Môngywa 1·30 and Bassein 1·23 and those returning high death rates from

diarrhoea were Thatôn 1'42, Magwe 1'05, Mandalay 0'98, Bassein 0'79, Mônywa 0'74 and Pyapôn 0'73.

**Respiratory Diseases.**—The rate 6'21 has shown a rise of 0'71 compared with the rate of previous year. Overcrowding and erection of unauthorised temporary huts in all available vacant plots in towns by refugees from neighbouring districts due to the present unsettled conditions favoured the spread of these diseases. The total number of deaths returned under this head was 7,355. Of these 3,667 were ascribed to pneumonia, 1,974 to pulmonary tuberculosis, 4 to whooping cough, and the balance 1,710 to other respiratory diseases. The highest rates were recorded in Mônywa 13'98, Taungdwingyi 13'31, Myaungmya 9'45, Bassein 9'15, Rangoon 8'77, Mandalay 7'84, Maymyo 7'24, Kyaiklat 7'22, Syriam 7'17, Yenangyaung 6'85, Pyu 6'15 and Myingyan 6'09.

**Tuberculosis.**—Out of 2,175 deaths from tuberculosis recorded 1,974 were ascribed to pulmonary tuberculosis, 6 to tuberculosis of joints and the rest 195 to other forms of tuberculosis. The death rate from pulmonary tuberculosis was 1'67. This rate showed a rise of 0'23 compared with the rate for 1940.

The Corporation of Rangoon continued to maintain the tuberculosis dispensary opened in 1935. There was a total attendance of 29,474 persons, of these 3,857 were new patients among whom 336 were found to be suffering from tuberculosis in one or other of its manifestations. The Medical Officer and the Tuberculosis Nurse of the dispensary made 923 and 959 home visits respectively during the year under report. They reported that in the majority of the cases visited the patients were mostly living in dark and ill-ventilated rooms, their diet had very poor food value and economic conditions extremely low. Of the 336 patients, 120 were given symptomatic treatment, as Gold and Calcium Therapy were considered unsuitable in these cases. Of the other 216 patients, treatment by Myocrysin (Gold Therapy) was given to 82 patients and treatment by Calcium Gluconate was given to 54 patients. The remaining 80 patients failed to turn up for treatment.

Treatment by Artificial Pneumothorax and Ultra Violet Ray Radiation could not be given owing to lack of equipment.

**Beri Beri—0'05.**—This figure showed a fall of 0'02 compared with the rate for 1947. The highest rates were recorded in Myaungmya 0'76, Kamayut 0'55, Bassein 0'31, Thingangyun 0'25, Wakèma 0'21 and Akyab 0'21.

**Cerebrospinal Meningitis.**—Twenty deaths from this disease were reported from towns, of which 8 were in Mandalay, 4 in Yenangyaung, 2 each at Akyab and Yamèthin and 1 each at Rangoon, Maymyo, Pyawbwè and Mônywa.



## CHAPTER V.

## Urban and Rural Sanitation.

Four municipalities had appointed whole-time Health Officers while the rest had co-opted the Local Government Medical Officers as members of their Committee and delegated to them the powers of the Health Officer under section 31 (1) (e) of the Burma Municipal Act.

The appointment of whole-time Health Officers in the larger municipalities was greatly hampered due to acute shortage of Public Health Sub-Assistant Surgeons while in the case of smaller municipalities their budget provision for public health purposes were too meagre to meet the expenses that would involve in entertaining such posts.

**Water Supplies.**—Few municipalities could afford to introduce and maintain a piped water supply. Shallow wells and tanks form the main sources of water supply in these towns. These wells were periodically chlorinated to render the supplies safe. Some have deep tube wells for the drinking water supply.

**Conservancy.**—Due to financial stringencies and dearth of wet sweepers the pre-war strength of dry and wet sweepers had not been maintained and the bucket system of removal of excreta had not yet been revived in the municipalities. As such the disposal of night soil and removal of rubbish in several towns were not satisfactorily carried out. Removal of debris, sweeping of public roads, cleaning of drains and disposal of garbage both from town and bazaar were however carried in all the towns with the available staffs.

**Markets.**—The number of bazaar-sellers increased year by year. Consequently construction of temporary stalls in the immediate vicinity of the main bazaar increased. Encroachments of the stalls over the drains were generally complained of. Difficulty was found by the authorities to maintain the Bazaars in satisfactory sanitary conditions owing to the ignorance or apathy of most of the stall-holders to observe the market bye-laws with regard to sanitation.

## CHAPTER VI.

## Maternity and Child Welfare.

**Maternal Mortality Rate.**—The maternal mortality rate as calculated on the number of deaths of mothers due to child birth per thousand of *total births* (i.e. live-births and still-births) was 8·38 for 53 towns in Burma as against 9·21 of 70 towns for the year 1947. All deaths of mothers within 14 days of delivery were registered as being due to effects of child birth. The maternal mortality rate for rural areas cannot be furnished as registration of births and deaths had not yet been reintroduced in rural areas during the year under report.



**Still-Birth Rate.**—The number of still births recorded in 53 towns during the year was 2,549 and the rate was 54·74 per 1,000 of total births (*i.e.* live-births and still-births) as against 61·32 of 70 towns for the year 1947.

**Infant Mortality<sup>1</sup> Rate.**—The infant mortality rate of 53 towns for the year under report was 266·79 as against 297·70 of 70 towns for the previous year. Probably the main reason for the high mortality rate was malnutrition. Expectant mothers, even those of the middle class who could afford good diets, starved themselves during pregnancy with the idea that they were observing dietary rules. In some very poor cases pregnant mothers would restrict themselves to such an extent that they would eat nothing but rice and a few grains of salt as they could not afford to have dried fish. The customary belief to abstain from ordinary diets and to live on rice with some dried fish and other dried products in order to be free from ailments was still being followed in this country. The towns which recorded high rates are :—Moulmein-gyun 518·66 (474·63), Môngywa 470·21 (326·34), Thayetmyo 445·73 (636·01), Taungdwingyi 366·74 (358·35), Myingyan 363·93 (429·59), Wakema 363·32 (514·89), Chauk 359·15 (647·54), Mandalay 342·99 (320·39), Kamayut 341·70 (523·94), Myaungmya 337·00 (300·00) and Sagaing 334·88 (449·23).

The towns which recorded lowest rates are Myitngè 45·80 (111·11), Toungoo 59·30 (110·29), Tavoy 61·28 (43·36), Nattalin 66·66 (89·04), Minhla 70·31 (116·56), Kyaukpyu 76·50 (178·38), Pyapôn 77·42 (121·14), Kyangin 81·08 (188·98), Sandoway 81·97 (110·29) and Thônzè 92·66 (155·95).

There were no Child Welfare Societies in Moulmeingyun, Môngywa, Thayetmyo, Taungdwingyi, Wakema and Chauk. Maternity and Infant Welfare Societies had been re-established in Mandalay, Kamayut, Myaungmya, Sagaing and Myingyan.

**Maternity and Child Welfare.**—A Board known as "Women and Children Welfare Board" was constituted by Government in 1947. The Board assists and advises Government in carrying out the directive principle of State policy as defined in Article 37 of the Constitution of the Union of Burma.

Among other activities, the Board has opened at Rangoon a training school for Health Visitors, has established a model Maternity and Infant Welfare Centre, a model Maternity Home, and a model Day Nursery. Candidates for training for Health Visitors are selected by the Board with a view to have the selection as representative as possible, of the various districts of the country. As they qualify, candidates are seconded for duty with the Voluntary Societies. In recognition of such and other suitable aid, the Board retains the right to exercise supervisory and directional control over these voluntary societies.

The following is a brief summary of activities during the year 1948 of the principal child welfare societies in Burma :—

*Rangoon.*—The Corporation of Rangoon maintained two Infant Welfare Centres, one at Kemmendine and the other at Theinbyu. Two Lady Medical Officers (Medical Graduates) and 11 Lady Health Visitors were employed in these Centres. Of the two Lady Medical Officers one proceeded on leave on 31st May 1948 preparatory to retirement and the other Officer was placed in charge of both the Maternity Welfare Centres, East and West for the remaining part of the year. Two Lady Medical Officers paid 1,238 and Lady Health Visitors 38,510 Home Visits. There were 2,941 ante-natal attendances at the Centres. The National Council of Women in Burma continued to run the Baby Welcome Clinic at Bowlane with one Health Visitor and one Midwife. During the year 2,112 Infants, 1,378 Toddlers and 854 ante-natal cases, making a total of 4,344 registered at the clinic.

*Mandalay.*—The Maternity and Infant Welfare Society was revived during the year under review. The Society maintained two Lady Health Visitors, six midwives and one female servant. The clinics were opened daily, except on Sundays at the out-door patient department of the Mandalay General Hospital. A total number of 6,937 attendances at the Clinic was recorded, and the total number of Home Visits made by the Health Visitors was 6,209. The midwives conducted 610 cases.

*Maymyo.*—A total of 4,969 attendances was recorded at the Centre. The Lady Health Visitor of the Maternity and Infant Welfare Society, Maymyo, made 4,522 Home Visits while the three midwives paid 6,183 Home Visits and conducted 324 confinement cases.

*Bassein.*—The Infant Welfare Society, Bassein provided an Infant Welfare clinic which was kept open twice in a week. A total of 5,871 clinic attendances was recorded during the year. The Lady Health Visitor and four midwives of the Society gave 5,560 Home Visits and 589 confinement cases were attended by the midwives of the Society.

*Moulmein.*—In connection with the Independence Day celebration held at Moulmein the Society for the Prevention of Infant Mortality conducted a Baby Show, where 253 babies entered the competition. The Red Cross Society, Burma, awarded a Silver Cup to the best Baby of the Show and eight other deserving babies were awarded with suitable prizes by the Society. Milk powder was distributed to all the babies who entered the competition.

A total of 2,548 visits was recorded at the Clinics of Maungan and Dinewunkwin. The Lady Health Visitor gave 2,145 Home Visits and four midwives conducted 595 confinement cases during the year.



*Myaungmya.*—The Infant Welfare Society of Myaungmya conducted a Baby Show at the Myaungmya Independence Day Celebration held on 4th, 5th and 6th January 1949. A total of 640 babies turned up for the competition. Cash prizes were awarded to deserving babies and a jacket each was given to all those babies present on the occasion.

The Lady Health Visitor of the Society paid 1,991 Home Visits and the two Midwives attended to 247 confinement cases. A total of 1,610 visits was recorded at the clinics.

*Syriam.*—The Child Welfare Society, Syriam, registered 2,294 visits at the two centres run by the Society at Bawlonkwin and Thanlyin quarters. The Lady Health Visitor of the Society paid 3,548 Home Visits and the two midwives of the Municipality conducted 487 confinement cases during the year.

This society held a Baby Show at the celebration of the Independence Day.

*Insein.*—The Infant Welfare Society continued to function during the year. A total of 1,399 cases were attended to at the Baby Clinic of the Society while the Nurse Midwife attached to the Clinic paid 1,361 house-to-house visits.

*Kyauksè.*—The Infant Welfare Society of Kyauksè was re-established in October 1948. The Lady Health Visitor attended to 430 cases at the clinic of the Society. Of these 57 were sent to the Civil Hospital, for treatment. She also paid 1,513 Home Visits during the year and 90 persons were directed to the Civil Hospital, for treatment.

## CHAPTER VII.

### Public Health Propaganda.

**Hygiene Publicity Bureau.**—U Thaw Zan, as Hygiene Publicity Officer, was in charge of the Bureau throughout the year. The Bureau reproduced the pre-war leaflet on Child Welfare and prepared and printed one cartoon on Venereal Disease and two posters on Venereal Disease and Leprosy. Most of the previous leaflets, cards and posters were re-printed during the year. The total number of copies printed and reprinted during the year under report amounted to 271,874 copies. The total issued was 153,516.

The question of re-equipping the Hygiene Publicity Officer and District Health Officers with magic lanterns was kept in abeyance owing to inability to get suitable types of lanterns. A series of sketches was drawn for making magic lantern slides. The question of getting up mobile cinema units was dropped consequent on the Government's decision that dissemination of public health propaganda should



be undertaken by the Information Department. Certain health models, posters, charts, etc., were, however, produced or renovated. These are kept at the Harcourt Butler Institute of Public Health, Rangoon and are ready for use at Health exhibitions, etc.

The Hygiene Publicity Officer gave a course of health lectures to a gathering of teachers at their Kokine Holiday Camp and put up a health stall at the Independence Day Celebration in Rangoon.

**Propaganda by Rural and Urban Health Staffs.**—Rural and urban health staffs gave lectures or short talks on various health subjects to the people in their respective charges and distributed health leaflets, etc., throughout the year. They were thus responsible for giving 1,446 lectures and for distributing 11,229 copies of leaflets, etc., in the year under report.

**Red Cross Donation.**—A further sum of Rs. 400 was drawn during the year from the Burma Red Cross Society's grant of Rs. 5,000 made in 1947 for making and renovating health models, posters, charts, etc. As already reported in last year's report, Rs. 600 was drawn in 1947.

## CHAPTER VIII.

### Personnel employed on Public Health Work in Burma.

#### District Staff.—

*Assistant Director of Health Services.*—The sanctioned strength in this cadre is two, one for South Burma and the other for North Burma. U Tha Gyaw, B.Sc., M.B., D.P.H., and Mr. V. W. Fenn, L.S.M.F., M.P.H., the permanent incumbents of these two posts held charge of South Burma and North Burma areas respectively.

*District Health Officers.*—The sanctioned strength in the cadre of District Health Officers is 5 ; 3 permanent and 2 temporary. The three permanent posts of District Health Officers were held substantively by (1) U Lat, M.B. B.S. (Rgn.), D.P.H. (Cal.), (2) U Ba Nyun, B.Sc., M.M.F., D.P.H. (Cal.), and (3) Mr. C. C. Po, M.A., L.M.S.S.A., D.P.H. (Lond.), R.C.P.S. (Eng.) and the remaining two temporary posts were held by Mr. A. Mohsby, M.B.E., M.B., B.S., and Mr B. C. Barua, M.B., B.S., D.P.H. (Eng.).

U Lat and U Ba Nyun were posted to Hanthawaddy and Bassein Districts as wholetime District Health Officers, and Mr. C. C. Po was attached to the temporary post of Health Officer, Rangoon Suburban Areas which was created on temporary basis in addition to the five posts of District Health Officers referred to above. Mr. Mohsby and Mr. Barua were posted to Toungoo and Akyab Districts respectively

as whole-time District Health Officers. Due to acute shortage of qualified Medical Officers in the Public Health Department one post of District Health Officer was kept vacant.

*Assistant District Health Officers.*—The sanctioned strength in this cadre is five (permanent). The permanent incumbents of these five posts are (1) Mr. Ah Shoung, M.M.F., D.P.H., (2) U Ba Nyan, M.B., B.S., D.T.M. (Liv.), (3) Mr. B. C. Barua, M.B., B.S., D.P.H. (Eng.), (4) Mr. R. B. Singh, M.B., B.S., and (5) Mr. M.S. Moitra, M.B., B.S., D.P.H. (Eng.), D.T.M. & H. (Lond.). The post of Health Officer, Maymyo which is equivalent in status to that of Assistant District Health Officer, was substantively held by Mr. A. Mobsby, M.B., B.S. Of these five permanent incumbents of the posts of Assistant District Health Officers only Mr. R. B. Singh, M.B., B.S., was posted to Bassein District with headquarters at Bassein. Mr. Ah Shoung was on leave preparatory to retirement. The services of U Ba Nyan were placed at the disposal of Shan State Government. Mr. B. C. Barua was promoted as officiating District Health Officer and posted to Akyab District. Mr. M. S. Moitra was posted as Health Officer, Maymyo, in place of Mr. Mobsby, who was promoted as District Health Officer and posted to Toungoo District. Thus there were four vacancies for the posts of Assistant District Health Officers. These vacancies were filled up by promotion of four senior Public Health Sub-Assistant Surgeons, viz. Mr. S. Paul, U Aung Than, U Lwin and U Pa How. The first two were put on Port Health duties at the Rangoon Port. U Lwin was posted to Insein District and U Pa How was attached to the Bacteriological Section of the Harcourt Butler Institute of Public Health, Rangoon. On creation of the post of Health Officer, Mingaladon Air Port on a temporary basis U Lwin was entrusted with the duties of the Health Officer, Mingaladon, and U Myat Maung, Public Health Sub-Assistant Surgeon was promoted to officiate as Assistant District Health Officer and posted to Insein District.

*Public Health Sub-Assistant Surgeons.*—Entertainment of 39 Public Health Sub-Assistant Surgeons on permanent basis and 5 on temporary basis was sanctioned by Government. Due to dearth of medical personnel it was possible to employ only 21 Public Health Sub-Assistant Surgeons on permanent basis. Of these 4 were promoted as Assistant District Health Officers while 1 officiated as Hygiene Publicity Officer, Burma and another as Assistant Malariologist, Burma. One was entrusted with the duties of Health Officer, Mingaladon Air Port. Two were put on Port Health duties at Rangoon and Akyab Ports. The services of one were placed at the disposal of Shan State Government and that of two at the disposal of War Office. Thus only 9 Public Health Sub-Assistant Surgeons



were actually employed on epidemic and general sanitary duties in Burma proper. To tide over the loss on this, three senior and experienced Public Health Inspectors had to be entrusted with the duties of the Officer-in-Charge of 3 Epidemic Mobile Teams and three other Public Health Inspectors, 9 Vaccinators, 3 Mobile Team Drivers and 18 coolies were appointed to run these teams.

*Public Health Inspectors.*—Eighty-five Public Health Inspectors and 8 Inspectors of Vaccination were employed in rural areas and 124 Public Health Inspectors were employed in urban areas.

Of the 11 candidates who underwent the training class of Public Health Inspectors held at the Harcourt Butler Institute of Public Health, Rangoon, in the year 1947-48, 10 candidates passed the final examination held in July 1948.

*Rangoon. Harcourt Butler Institute of Public Health, Rangoon.*—

The post of Director, Harcourt Butler Institute of Public Health, Rangoon has not been revived on account of the paucity of qualified officers in the Public Health Department, but the post of Assistant Director, Harcourt Butler Institute of Public Health was revived in the year 1946 and Mr. S. Suvi, the permanent incumbent of the post of Director, Vaccine Dépôt has been posted to officiate as such.

The post of Director, Vaccine Dépôt has not been revived in view of the fact that vaccine lymph could not be manufactured in this country at present.

*Malaria Bureau.*—The post of Malariologist, Burma is a permanent one. The permanent incumbent U Tin, D.T.M., has been granted leave preparatory to retirement and no one has yet been promoted to fill the vacant post.

The post of Assistant Malariologist, Burma, which is equivalent in status to that of the Assistant District Health Officer has been filled substantively by U Ohn Pe, L.M.P., L.P.H., one of the Epidemic Sub-Assistant Surgeons.

To combat Malaria, 2 Malaria Control Units consisting of 1 Officer-in-Charge, 2 Assistant Malaria Inspectors, 1 clerk, 1 driver, 2 maistries and 18 coolies in each of the unit inherited from the Civil Affairs Service (Burma) administration, were continued to be entertained at Kyaukpyu and Akyab respectively. The team at Akyab was disbanded on the 31st August 1948 owing to financial stringency.

*Port Health, Rangoon.*—The post of Port Health Officer, Rangoon, and that of the two posts of Assistant Port Health Officers are permanent. U Ba Maung, M.B., B.S., D.P.H., D.T.M. & H. (Eng.) the permanent incumbent held the former post while U Maung U, M.B., B.S., D.P.H. (Cal.) and U Hla Baw, L.M. & S., D.P.H., held the latter posts throughout the year.



*Special Leprosy Officer, Burma.*—U Tha Saing, L.M.P., L.P.H., one of the Epidemic Sub-Assistant Surgeons has been appointed substantively in the post of the Special Leprosy Officer, Burma. The post is equivalent in status to that of the District Health Officer.

*Hygiene Publicity Officer, Burma.*—The post of Hygiene Publicity Officer, Burma is of temporary nature and U Thaw Zan, L.M.P., L.P.H., has been appointed to officiate temporarily. This post is equivalent in status to that of the Assistant District Health Officer only with effect from 4th January 1948.

*Headquarters Staff.*—U Maung Gale, T.P.C., B.A., M.B., D.P.H., held the post of Deputy Director of Health Services, Burma.

THA MYA, M.B. (Cal.),  
Director of Medical and Health Services, Burma.

RANGOON, the June 1950.

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## APPENDIX A.

Annual vaccination reports of ten rural areas, *viz.*, Prome, Toungoo, Maubin, Thayetmyo, Minbu, Magwe, Pakôkku, Chill Hills, Meiktila and Myingyan and thirty urbans, *viz.*, Pegu, Nyaunglebin, Thôngwa, Prome, Shwedaung, Paungdè, Toungoo, Shwegyin, Pyu, Ngathainggyaung, Kyônpyaw, Myanaung, Kyangin, Yandoon, Kyaikto, Kawkareik, Thayetmyo, Minbu, Magwe, Taungdwingyi, Pakôkku, Myitnge, Meiktila, Myingyan, Nyaung-U, Pyinmana, Pyawbwè, Shwebo, Ye-U and Taunggyi could not be included in the statement as these were not received in this office in time due to various reasons.

## VACCINATION PERFORMED.

A total of 1,347,486 persons was vaccinated during the year. Of these, 877,870 persons were vaccinated in rural areas and 469,616 persons in urban areas.

**Rural Vaccination.**—Of 881,870 operations performed in districts, 336,047 were primary and 545,840 revaccinations.

Of the primary operations, 232,358 were successful, while the results of 71,170 were left unverified. The success rate in verified cases was 69·14 per cent.

Of the successful primary operations, 58,319 were on infants under one year of age, 140,137 were on children of one to six years and 33,902 on those above six years.

Of the 545,840 revaccinations, 74,024 were successful, while the results of 163,553 were reported as "Unknown." The rate of success in known cases was 13·65.

The number of persons known to have been successfully vaccinated and revaccinated per thousand of population was 39·02.

Two districts, *viz.*, Arakan Hill Tracts and Myaungmya reported 100 per cent success rate of primary vaccination. Of the remaining 25 districts, 8 reported successes between 90 and 100 per cent and the rest, *viz.*, 17 districts reported successes below 90 per cent.

**Urban Vaccination.**—In forty-four urban areas, 470,639 operations were performed by regular vaccinators. Of these 65,287 were primary and 405,352 were revaccination. Of the primary 55,664 were successful, while the results of 6,084 remained unverified. The success rate in verified cases was therefore 85·26 per cent. Eight towns reported 100 per cent success. Of the other 36 towns, 13 towns reported success between 90 and 100 per cent, while the rest, *viz.*, 23 towns reported successes below 90 per cent. Low success rates were reported from Myitkyina 43·45, Yamèthin 49·91 and Mawlaik 59·34.



Of the 55,664 successful vaccinations, 30,555 were on infants under one year of age and 22,387 on children of one to six years.

Of the 405,352 revaccinations, 39,338 were successful, while 99,631 cases were not inspected. The percentage of success in verified cases was 9·70 per cent. The number of persons successfully vaccinated per thousand of population was 87·34.

**Jails.**—Of the 12,149 operations performed in Jails 297 were primary and 11,852 revaccinations. Of the primary cases 23·91 per cent were successful and of the revaccinations 13·93 per cent were successful.

**Ports.**—A total of 12,524 operations were performed at the Ports of Rangoon and Mergui. Of these 732 were primary and 11,773 revaccinations.

**Federated Shan States.**—A total of 42,839 primary operations and 65,103 revaccinations were performed in rural areas of Federated Shan States. The success rate in primary cases was 71·12 per cent and in revaccinations 21·45. In the towns of Lashio and Kalaw, 601 primary and 2,823 revaccinations were performed. Of the primary cases 548 or 91·18 per cent were successful, while the success rate of revaccination was 26·99 per cent.

**Verification Work of Inspecting Officers.**—In rural areas District Health Officers, Assistant District Health Officers, Public Health Sub-Assistant Surgeons, Public Health Inspectors and Inspectors of Vaccinations carried out verification work, while in the case of urban areas the work was performed by the Superintendents of Vaccination.

**Vaccine Lymph Supply.**—The manufacture of vaccine lymph has not yet started in Burma. Arrangements are being made to construct additional buildings for preparation of vaccine lymph at the Harcourt Butler Institute of Public Health, Rangoon. At present vaccine lymph is obtained from the Bengal Vaccine Institute, Calcutta. A total of 1,930,880 doses was distributed to local bodies during the year under review.

## APPENDIX B.

REPORT OF WORKS CARRIED OUT BY THE SUPERINTENDING ENGINEER,  
PUBLIC HEALTH CIRCLE, DURING THE YEAR 1947-48.

1. *Water Supply and Sanitary Installations.*—New pumping plants were installed at Tharrawaddy, Letpadan, Minhla and Nyaunglebin for the supply of water to these towns. The plants installed at these four towns were of the same type, consisting of duplicate sets of Broom & Wade air compressors having a capacity of 80 cub. ft. of free air at 50 lbs. pressure and Lee Howl centrifugal pumps with a capacity of 15,000 gallons per hour against 60 ft. head driven by 30 H.P. diesel Lister Engines through a counter shaft.

At Minhla a new 8" dia. tube well was sunk to a depth of 188½ feet below ground level, the yield of which is between 10,000 to 14,000 gallons per hour.

New plants were sent to Minbu and Thayetmyo during the year but have not yet been installed.

Repairs to the distribution mains in Prome were carried out and arrangements were in hand of installing a suitable pumping plant.

Estimates had been prepared for the restoration of the water supply and installation of new plants at Taungdwingyi and Maubin.

Maintenance and restoration of existing water supply and sanitary installations were carried out at Government Buildings and institutions as well as at requisitioned buildings. The more important restoration works were :—

52, Windermere Park, Officers' quarters.

264, Dalhousie Street, Clerks' quarters.

7, Lloyd Road, Officers' quarters.

46, Stewart Road, Officers' quarters.

38, Simpson Road, Medical Students Women's Hostel.

Training College (old Rangoon College), Women's Hostel.

228, Dalhousie Street. Offices of Director of Land Records.

11, East Bazaar Road.

Main Washroom and latrines at Government High School,  
Rangoon:

New Obo Police Station, water supply only.

Nurses and Junior Assistant Surgeons Quarters, Rangoon General  
Hospital.

Medical College and Chemical Examiner's Laboratories.

Criminal Investigation Department Lines, Insein.

Staff Quarters at Government Technical Institute, Insein.

Staff Quarters at Government Dockyard, Dawbong.

Gaolers Quarters, Rangoon Jail.



Restoration of the water supply and sanitary installations at 70 requisitioned buildings in Rangoon were carried out and about 180 installations at requisitioned buildings were maintained during the year.

Works carried out for various Boards included the complete repairs and modification of the sanitary installation at the Rangoon Boat Club and No. 32, Tower Lane, for use as Maternity Homes for the Welfare Board ; additional sanitary facilities at the Civil Supplies Board Office.

Works undertaken for the Telecommunications Department included the complete renewal of water supply and sanitary installations at Telephone House and the Central Telegraph Office. The latter work was about 50 per cent complete at the end of the year.

Defence works included the repairs to the Officers Mess at the Mayo Marine Club and the provision of water supply and sanitary installations at the new Naval Barracks at Monkey Point. The latter work was still in progress at the end of the year.

New pumping plants installed during the year were :—

*Government Dockyard.*—Duplicate electric driven air compressor of 15 H.P. and 80 cub. ft. capacity. Duplicate electric driven centrifugal pumps 5 H.P. 6,000 gallons per hour against 75 ft. head.

*Windermere Park.*—Duplicate electric driven centrifugal pumps 10 H.P. 6,000 gallons per hour against 150 ft. head.

*Law Courts.*—Single electric driven centrifugal pump 10 H.P. 6,000 gallons per hour against 150 ft. head.

*Technical Institute, Insein.*—Duplicate electric driven air compressor 15 H.P. capacity 80 cub. ft. of air per minute. Duplicate electric driven centrifugal pumps 5 H.P. 6,000 gallons per hour against 75 ft. head.

*Secretariat.*—Duplicate electric driven pumps 3 H.P. 2,500 gallons per hour against 75 ft. head.

*Government Press.*—Single set as above.

*Latter Street Police Station.*—Single set as above.

*Police Supply Dépôt.*—Single set as above.

*Mayo Marine Club.*—Single set as above.

*Burma Navy Barracks.*—Single set as above.

*Telephone House.*—Single set as above.

*Lanmadaw Police Station.*—Duplicate set 5 H.P. electric driven centrifugal pump 2,500 gallons per hour 125 ft. head.

*Tharrawaddy Jail.*—Duplicate diesel driven air compressors and engines.

Electric driven pumps of low H.P. were also installed at the following buildings in Rangoon used as offices :—

Whiteaway Building.

Rander House.

Randeria Building.

Royal Hotel.

619, Merchant Street.

State Lottery Office.

Munees Building.

Siddique Building.

In addition water was supplied by mobile plant to several buildings in the Rangoon area as the pressure in the Corporation Mains was low.

Bazaars.—*Nil*.

Drainage Scheme.—*Nil*.

*Burma Underground Water Act, 1930.*—Six permanent and 14 temporary licences for new tube wells were granted in accordance with the Burma Underground Water Rules, 1941.



## APPENDIX C.

## PUBLIC HEALTH REPORT FOR THE YEAR 1948 FROM CHIEF MEDICAL OFFICER, BURMA CORPORATION, LIMITED, NAMTU.

Patients treated in Hospital, In-door and Out-door (new admissions only) during the year 1948 :—

				New Admissions.	
				In-Patients.	Out-Patients.
Cholera	...	...	...	...	...
Small-pox	...	...	...	...	1*
Chicken-pox	...	...	...	2	9
Measles	...	...	...	...	2
Mumps	...	...	...	3	68
Plague	...	...	...	...	...
Diphtheria	...	...	...	...	...
Malaria	...	...	...	940	6,895
Blackwater fever	...	...	...	2	...
Kala-azar	...	...	...	1	...
Enteric fever	...	...	...	29	1
Dysentery	...	...	...	32	242
Diarrhoea	...	...	...	17	634
Intestinal parasites	...	...	...	7	455
Hernia	...	...	...	5	1
Hydrocele	...	...	...	3	...
Other diseases of Alimentary system.				125	9,821
Pneumonia	...	...	...	157	79
Tuberculosis of Lungs	...	...	...	47	22
Other diseases of the Respiratory system.				117	4,883
Diseases of blood and spleen	...	...	...	65	608
Diseases of Heart of Circulatory system.				16	61
Diseases of Urinary system	...	...	...	7	125
Diseases of Lymphatic system	...	...	...	13	59
Diseases of Nervous system	...	...	...	21	791
Diseases of Generative system	...	...	...	42	134
Diseases of the Eye	...	...	...	14	1,412
Diseases of Ear, Nose and Throat	...	...	...	...	611
Diseases of Skin	...	...	...	61	4,522
Goitre	...	...	...	...	597
Deficiency diseases	...	...	...	11	54
Syphilis	...	...	...	18	71
Gonorrhoea	...	...	...	16	90
Labour—Normal	...	...	...	98	17
Labour—abnormal	...	...	...	12	1
Diseases of bones, joints and muscles.				49	1,759
Injuries	...	...	...	284	5,375
Tumours	...	...	...	10	19
Infection of areolar tissues	...	...	...	67	958
Dog-bite	...	...	...	2	26
Opium poisoning	...	...	...	...	...
Other poisoning	...	...	...	2	...
Pyrexia of uncertain origin	...	...	...	7	566
Total	...	...	...	2,302	40,968

\* Treated in segregation camp.

*Return of Patients Treated, both In-door and Out-door  
during the year 1948.*

			In-Patients.		Out-Patients.	
			Total—New and old cases.	Daily Average.	Total—New and old cases.	Daily Average.
January	...	...	1,414	45·6	6,267	202·5
February	...	...	1,283	44·24	8,317	287·0
March	...	...	1,463	47·2	9,931	321·0
April	...	...	1,427	49·0	9,718	324·0
May	...	...	1,585	51·1	11,634	375·5
June	...	...	1,649	55·0	13,579	452·6
July	...	...	2,035	65·6	15,088	487·0
August	...	...	2,305	74·35	14,290	461·0
September	...	..	2,321	77·36	14,506	484·0
October	...	...	2,105	68·0	12,445	402·0
November	...	...	1,977	65·9	12,471	416·0
December	...	...	1,979	63·84	11,121	358·4
Total	...	...	21,543	707·19	139,361	4751·0

Daily average of In-Patients treated ... 59  
Daily average of Out-Patients treated ... 381

*Deaths in Hospital during the year 1947—*

Malaria	...	...	...	...	8
Enteric fever	...	...	...	...	6
Pneumonia	...	...	...	...	8
Tuberculosis of lungs	...	...	...	...	9
Tuberculosis of intestines	...	...	...	...	3
Valvular disease of heart	...	...	...	...	3
Cerebro-spinal meningitis	...	...	...	...	2
Anæmia	...	...	...	...	5
Marasmus	...	...	...	...	1
Acute Enteritis	...	...	...	...	1
Cirrhosis of liver	...	...	...	...	1
Intestinal obstruction	...	...	...	...	1
Intestinal obtsruction ( with multiple perforations of diver- ticulum of the colon)	...	...	...	...	1
Cacrinoma, stomach	...	...	...	...	1
Cerebral hæmorrhage	...	...	...	...	1
Septicæmia	...	...	...	...	1
Gunshot wounds	...	...	...	...	1
Gangrene, right upper extremity with septicæmia	...	...	...	...	1
Burns, 5th degree (gangrenous and extensive) septicæmia	...	...	...	...	1
Compound comminuted fracture of both bones of right leg and last three matatarsal bones of the right foot (Crushed right leg)	...	...	...	...	1
Placenta prævia	...	...	...	...	1
Total	...	...	...	...	57



*Births in Hospital during the year 1947—.*

Live-births	...	...	...	...	96
Still-births	...	...	...	...	6

**Malaria.—**

Number of cases	...	...	...	...	7,835
Number of deaths	...	...	...	...	8
Death rate per 100	...	...	...	...	0.1021

**Prophylaxis.**—Prophylactic administration of Paludrine in the dosage of one tablet bi-weekly for adults and proportionately less for children was given and the result was encouraging.

**Enteric Fever.—**

Number of cases	...	...	...	...	30
Number of deaths	...	...	...	...	6
Death rate per 100	...	...	...	...	20

**Pneumonia.—**

Number of cases	...	...	...	...	236
Number of deaths	...	...	...	...	7
Death rate per 100	...	...	...	...	2.97

**Tuberculosis of Lungs.—**

Number of cases	...	...	...	...	69
Number of deaths	...	...	...	...	9

**Mumps.—**

Number of cases	...	...	...	...	71
Number of deaths	...	...	...	...	Nil.

**Chicken-pox.—**

Number of cases	...	...	...	...	11
Number of deaths	...	...	...	...	Nil.

**Small-pox.—**

Number of cases	...	...	...	...	1
Number of deaths	...	...	...	...	Nil.
Total number of vaccinations done during the year	...	...	...	...	1,234

**T.A.B. Inoculation.**—One thousand two hundred and twenty-two persons were inoculated with T.A.B. Vaccine during the year.

**Cholera.—**

Number of cases	...	...	...	...	Nil.
Number of persons inoculated with cholera vaccine	...	...	...	...	919

**Industrial Diseases.—Nil.**

There was no case of lead poisoning during the year under review.

**Prevalent Diseases.**—Malaria, diseases of the Alimentary system, Respiratory system, skin and injuries are common diseases in the locality.

**Infectious Diseases.**—There was one case of modified small-pox in Panghai area during the year. The patient recovered. Necessary steps were taken to prevent the disease from taking an epidemic form.

There were also a few cases of Chicken-pox, Mumps and Measles during the year. All responded to treatment.

There were two sporadic cases of Cerebro-spinal meningitis during the year. Both died.

**Water Supply.**—There was plentiful supply of good and wholesome drinking water throughout the year.

**Milk.**—Fresh cow's and buffaloe's milk at reasonable rate was available during the year. The milk supply was sufficient for the population.

**Vegetable.**—Fresh vegetables and eggs were always available but the prices were rather high.

**Beef, Mutton and Pork.**—These were regularly inspected. Fluky livers were destroyed.

**Slaughter Houses and Meat Stalls.**—These were regularly inspected and found in good condition.

**Bazaars.**—Eating houses, food stalls and markets were inspected regularly. They were kept clean and in good sanitary condition.

**Conservancy.**—The use of deep pit latrines was continued.

Refuse disposal was done by dumping into river and burning in pits wherever possible.

**Schools.**—Schools were visited periodically by the Senior Medical Officer. Prophylactic treatment for malaria with Paludrine and vaccination against small-pox were given to school children.

General health of the children was satisfactory.

**Police Lock-up.**—This was regularly visited. Sanitary condition was satisfactory and there was no complaint about food from the prisoners.

H. B. SINGH,  
for *Assistant Chief Medical Officer.*



## APPENDIX D.

## RANGOON AIRPORT, MINGALADON.

The work performed by the Health Officer, Rangoon Air Port, Mingaladon, during the year 1948 consisted of the following :—

1. *Inspection of In-coming Aircrafts.*—Seven hundred and sixty-four aircrafts, including 5 transit planes were inspected. (262 aircrafts and 6 transit planes in 1947.)

2. *Inspection of Out-going Aircrafts.*—During the year 1948, seven hundred and forty-five out-going aircrafts, including 7 in transit were inspected. (Two hundred and sixty-three aircrafts including 6 in transit in 1947.)

3. *Inspection of In-coming Passengers.*—Seven thousand six hundred and seventy-three in-coming civilian passengers, including 802 in transit were examined during the period and all of them were in possession of the necessary Medical Certificates. (2,226 in 1947.)

4. *Inspection of Out-going Passengers.*—Eight thousand five hundred and thirty-six out-going civilian passengers, including 802 in transit were examined and all were protected against cholera, small-pox, etc., as required by this Department. (2,692 in 1947.)

5. *Examination of In-coming Civilian Crew.*—Three thousand two hundred and fifty-two in-coming civilian crew, including 40 in transit were examined during the period and all were found carrying necessary certificates. (1,053 in 1947.)

6. *Examination of Out-going Civilian Crew.*—Three thousand two hundred and ninety-eight out-going civilian crew, including 91 in transit were examined during the whole period and all were found in possession of necessary certificates. (988 in 1947.)

7. *Issue of Bill Clearance.*—Seven hundred and thirty-six bills were issued during the period. (252 in 1947.)

8. *Vaccination.*—Five hundred and thirty-one cases of vaccination were performed during the whole period at the Rangoon Air-Port. (Nil in 1947).

9. *Inoculation.*—Two hundred and eighteen and 108 anti-plague and anti-cholera inoculations were performed respectively during 1948.

10. *Medical Treatment.*—Eight hundred and eleven cases of different types of ailments and 103 minor injuries were treated during the period under report. Nine patients brought by aircrafts were sent to Burma Military Hospital and Rangoon General Hospital.

11. *Infectious Diseases.*—No infected cases were detected amongst the in-coming and out-going passengers and crew during the period.

12. *Disinfection.*—No baggages of the infected persons and the contacts were disinfected during the period.

13. *Sanitation.*—It was under the control and supervision of the Director, Civil Aviation, Burma and it was quite satisfactory.

## PORT HEALTH ADMINISTRATION DURING 1948.

*Akyab.*—Twenty-nine vessels coming from different ports of India were inspected. They carried 1,155 passengers and 3,047 crew of both European and Asiatic Classes. In addition, 5 vessels which arrived from other Foreign ports with a total crew of 340 but without passengers were inspected during the year. Besides the above in-coming vessels 417 country boats with 7,582 crew and 470 passengers arrived from Indian ports during the year under review.

There were 28 vessels which sailed for the ports in India. They carried 3,187 crew and 4,821 passengers. Eight vessels with the crew of 496 left for ports beyond India and Burma. Besides the above 15 country boats with the crew of 101 left the Port for India.

No cases of illness or death were reported or detected on in-coming and out-going sea-going vessels.

*Kyaukpyu.*—No in-coming and out-going vessels called at this port during the year under review.

*Bassein.*—Forty-two vessels, 39 from Indian ports and 3 from port beyond India and Burma and 42 out-going vessels, 37 for Indian ports and 5 for ports beyond India and Burma called at the station. Of these 29 in-coming and out-going vessels and 4,280 crew were examined. No case of any infectious diseases was detected on these vessels.

*Moulmein.*—Twenty-one in-coming vessels, 18 from Indian ports and 3 from ports beyond India and Burma and 26 out-going vessels, 21 to ports in India and 5 to ports beyond India and Burma, were examined. They carried 3,686 crew and 4 passengers. One case of small-pox was detected on S.S. "Nadair" arriving from Madras. The patient was removed to the Contagious Diseases Hospital, Moulmein, for treatment. The vessel was disinfected and crew revaccinated. No other infectious diseases was detected in other vessels.

*Tavoy.*—Twenty-four in-coming vessels carrying 1,227 passengers and 24 out-going vessels carrying 1,170 passengers called at the port but no medical inspection was carried out due to shortage of staff.

*Mergui.*—Four vessels plying between Mergui and Penang were inspected during the year. They carried 298 crew, 50 out-going passengers and 41 in-coming passengers. All the crew and passengers were medically examined.

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RANGOON FOR THE YEAR 1948.

*Inspection of In-coming Vessels.*—The total number of cargo and passenger vessels inspected in the year 1948 was 470 or 107 less than the year 1947. Of these 218 were from Indian Ports and 252 were



from Foreign Ports. They carried 40,788 crew and 51,040 passengers, the figures being 11,798 and 66,872 less, respectively, than those of the year 1947. In addition, a number of passengers totalling 3,797 from Ports in Burma were examined in Rangoon. These passengers embarked at Arakan Ports on vessels which were on their way to Rangoon from Indian Ports.

*Infectious Diseases.*—Thirty-one cases of infectious diseases were reported by Commanders on 11 vessels, *viz.*, one case of small-pox, one case of plague, 2 cases of cholera, 4 cases of chicken-pox and 23 cases of measles. All the cases, except one case of cholera which was buried at sea and 9 cases of measles which were allowed to proceed to their residences on undertaking and one case of chicken-pox and 5 cases of measles which were left on board on undertakings, were sent to Contagious Diseases Hospital, Rangoon.

The following unreported cases of infectious diseases were detected on 4 vessels by the Port Health Staff during the course of Medical inspection :—

One case of small-pox and 3 cases of chicken-pox. All the cases were sent to Contagious Diseases Hospital, Rangoon.

*Deaths from Non-infectious Diseases.*—Seven such deaths were reported on 6 vessels.

*Vaccination Performed.*—The number of passengers examined under the Vaccination Act was 51,040. Of these 48,880 were found protected against small-pox and 2,160 were vaccinated. In addition, 359 vaccinations were performed among the members of ships' crew.

*Disinfection.*—Fourteen vessels and personal effects of 334 crew and 791 passengers were disinfected by this department during the year.

*Riverine Vessels.*—The following deaths and cases were reported on riverine crafts during the year. Nine deaths from non-infectious diseases. One case of small-pox, one chicken-pox, one case of mumps and one case of gastro enteritis. All the cases were sent to Contagious Diseases Hospital, Rangoon, except 9 deaths which were buried by relative. All precautionary measures were taken by this department.

*Inspection of Out-going Sea-going Vessels.*—There were 251 vessels proceeding to ports beyond India or 54 less than the year 1947. The Asiatic and African members of crew totalling 14,035 in number, European crew totalling 4,766 in number, and passengers 6,556 in number were examined before the bills of health were issued. Bills of Health were issued to 268 vessels sailing to Indian Ports during the year. 19,791 Asiatic and African members of crew, 5,222 European crew and 68,034 passengers who embarked these vessels for Indian Ports and 2,407 passengers for Arakan Ports were examined.

The following infectious diseases and non-infectious diseases were detected at the time of inspection before embarkation :—

One case of small-pox, 12 cases of chicken-pox, 3 cases of measles, 1 case of mumps, 17 cases of tuberculosis and 38 cases of fever.

Small-pox case, chicken-pox cases, measles and mumps cases were sent to Contagious Diseases Hospital, Rangoon and Health Officer, Corporation of Rangoon was informed of it. Nine fever cases and 1 Tuberculosis case were sent to Municipal Observation Hospital and 11 Tuberculosis cases were allowed to travel on ships Surgeon's undertakings and 5 Tuberculosis cases and 17 fever cases were rejected.

No case of plague is known to have developed amongst the crew and passengers of these vessels on their outward voyages.

New members of crew examined prior to signing on ships' articles totalled 1,295. Of these, 1,289 were passed fit and revaccinated and 6 were rejected.

*Vessels in Harbour.*—One case of Duodenal Ulcer was reported on one vessel in harbour during the year under review and was sent to Rangoon General Hospital where the patient died.

*Passengers by Seaplanes.*—One thousand three hundred and twenty-four passengers by seaplanes were examined during the year at the time of disembarkation. Besides them, 7,000 through passengers were also examined. All of them were found well.

*Miscellaneous Transactions and Remarks—Port Office Personnel.*—Ninety-five lighthouse men were examined, out of which 92 were passed fit and revaccinated and 3 were rejected.

*Fumigation.*—(a) Fumigation was done by sulphur trays as there was no fumigation apparatus. Four vessels were granted Deratisation Certificates after fumigation by means of sulphur trays. 2,827 lbs. of sulphur were burnt and a sum of Rs. 1,025 being fees for same was charged to the agents. 44 rats were collected and destroyed.

(b) Twenty-three vessels applied for Deratisation Exemption Certificates. After necessary inspection and trapping the vessels were granted Deratisation Exemption Certificates. Fees totalling Rs. 1,568 on account of inspection and trapping carried out on these vessels were charged to the agents.

No. of Vessels.	No. of Traps.	Rats Collected.	Rats Destroyed.	Rats Examined.	Rats found infected with plague.
23	2,288	35	20	18	Nil

Non-infectious diseases detected and reported were :—

Non-infectious cases	...	...	...	106
Non-infectious deaths	...	...	...	16



*Cholera*.—Four hundred and fifty-one persons were inoculated against cholera during the year.

*Plague*.—Four hundred and ninety-four persons were inoculated against plague during the year.

*Inspection of Provisions for Lascar Crew*.—Inspection of mustard oil for lascar crew of the S.S. "Yenangyaung" was made during the year. After inspection sample of mustard oil was taken from the ship and was sent to Harcourt Butler Institute of Public Health, Rangoon, for analysis and report. As the sample was found unfit for human consumption the agents were asked to take necessary action.

*Port Commissioners Area—Sanitation*.—The sanitation of the fore-shore area of the Port and King's Bank Colony was looked after by the Port Health Officer, Rangoon. The sanitation of the area on the whole was satisfactory.

The Port Health Officer was assisted by the following sanitary staff employed by the Port Commissioners, Rangoon.

1. Sanitary Inspectors	...	...	...	3
2. Assistant Sanitary Inspector	...	...	...	1
3. Sub-Sanitary Inspector	...	...	...	1
4. Plumber	...	...	...	1
5. Sweeper Jemadars	...	...	...	2
6. Sweeper Maistries	...	...	...	8
7. Sweepers	...	...	...	126

*Ratting and Trapping*.—The total number of rats destroyed by trapping during the year was 7,386.

*Cymag fumigation of Rat Burrows*.—Besides trapping cymag-fumigation of rat burrows in the area was carried out. A total of 1,723 burrows were gassed and 4,900 connecting holes were blocked. The total number of rats destroyed and recovered by this method was 95.

*Smoking out of Rat Burrows*.—A total of 329 rat holes were smoked. The number of rats destroyed and recovered by this method was 49.

Out of 7,530 rats caught during the year 6,946 were sent for examination. The attached statement shows the species of rats examined. There was no plague infection amongst them.

*Inspection of Food*.—Consignments of food were occasionally examined by this department at the request of the Port Commissioners and recommendation regarding fitness or otherwise is made by this department.

Six thousand eight hundred and sixteen Port Commissioners Staff and their families were vaccinated against small-pox during the year.

BA MAUNG, M.B., B.S., D.P.H., D.T.M. & H.,  
Port Health Officer, Rangoon.

TABLE No. 1.



TABLE NO. I.—*Details of In-coming Sea-going*

Months.			From Indian Ports.					
			No. of vessels.	No. of crew.	Number of passengers.			
					Male.	Female.	Boys.	Girls.
(1)			(2)	(3)	(4)	(5)	(6)	(7)
1948.								
January	...	...	17	1,905	2,317	313	111	100
February	...	...	20	2,011	3,255	435	190	184
March	...	...	23	2,359	4,113	699	341	301
April	.	...	24	2,188	3,725	575	274	260
May	...	...	24	1,948	3,158	741	324	314
June	...	...	16	1,551	3,798	633	286	239
July	...	...	20	2,010	2,580	430	161	186
August	...	...	19	1,832	3,250	435	190	189
September	...	...	14	1,365	2,284	228	111	82
October	...	...	14	1,555	2,369	395	181	147
November	...	...	14	14,65	2,425	355	159	166
December	...	...	13	1,422	2,477	325	127	148
Total	...		218	21,611	35,751	5,564	2,455	2,316

*Vessels inspected during the year 1948.*

Total.	From Foreign Ports.							Total.	
	No. of vessels.	No. of crew.	Number of passengers.					No. of vessels.	No. of crew.
			Male.	Female.	Boys.	Girls.	Total.		
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
2,841	25	2,393	98	50	17	14	179	42	4,298
4,064	24	1,702	10	8	1	...	19	44	3,713
5,454	34	2,341	109	41	10	14	174	57	4,700
4,834	28	2,062	191	93	47	43	374	52	4,250
4,537	25	1,812	535	257	143	95	1,030	49	3,760
4,956	21	1,489	165	25	7	10	207	37	3,040
3,357	22	1,560	193	97	92	51	433	42	3,570
4,064	19	1,554	538	155	96	68	857	38	3,386
2,705	9	662	12	22	1	1	36	23	2,027
3,092	16	1,339	468	149	97	82	796	30	2,894
3,105	15	1,273	484	63	44	31	622	29	2,738
3,077	14	990	116	64	25	22	227	27	2,412
46,086	252	19,177	2,919	1,024	580	431	4,954	470	40,788



TABLE NO. I.—*Details of In-coming Sea-going*

Months.			Continued, total number of passengers.					Total
			Male.	Female.	Boys.	Girls.	Total.	
			(18)	(19)	(20)	(21)	(22)	Crew. (23)
1948.								
January	...	...	2,415	363	128	114	3,020	4,298
February	...	...	3,265	443	191	184	4,083	3,713
March	...	...	4,222	740	351	315	5,628	4,700
April	...	...	3,916	668	321	303	5,208	4,250
May	...	...	3,693	998	467	409	5,567	3,760
June	...	...	3,963	658	293	249	5,163	3,040
July	...	...	2,773	527	253	237	3,790	3,570
August	...	...	3,788	590	286	257	4,921	3,386
September	...	...	2,296	250	112	83	2,741	2,027
October	...	...	2,837	544	278	229	3,888	2,894
November	...	...	2,909	418	203	197	3,727	2,738
December	...	...	2,593	389	152	170	3,304	2,412
Total	...	...	38,670	6,588	3,035	2,747	51,040	40,788

Vessels inspected during the year 1948—concl'd.

Medical inspection and observation.

Inspected.  Passen- gers  (24)	For temperature.		For vaccination.				Disinfection.		
	Tested.  (25)	Sick.  (26)	Crew.		Passengers.		No. of vessels.  (31)	Effect of	
			Found protected.  (27)	Vacci- nated.  (28)	Found protected.  (29)	Vacci- nated.  (30)		Crew.  (32)	Passen- gers.  (33)
3,020	1	1	4,298	...	2,721	299	4	154	582
4,083	4	4	3,688	25	3,729	354	2	...	...
5,628	8	8	4,665	35	5,340	288	3	41	...
5,208	7	7	4,062	188	4,925	283	3	...	...
5,567	5	5	3,691	69	5,472	95	1	...	...
5,163	2	2	3,040	...	5,033	130	...	...	...
3,790	1	1	3,570	...	3,720	70	...	...	...
4,921	7	7	3,344	42	4,664	257	1	139	209
2,741	3	3	2,027	...	2,473	268	...	...	...
3,888	4	4	2,894	...	3,829	59	...	...	...
3,727	6	6	2,738	...	3,670	57	...	...	...
3,304	...	...	2,412	...	3,304	...	...	...	...
51,040	48	48	40,429	359	48,880	2,160	14	334	791



TABLE NO. II.—*Details of Out-going Sea-going*

Months.			Inspection.						
			No. of vessels.	Asiatic crew.	Deck passengers.				
					Male.	Female.	Boys.	Girls.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
TO FOREIGN PORTS, 1948.									
January	...	...	25	1,310	11	1	...	...	12
February	...	...	28	1,624	218	64	38	29	349
March	...	...	34	1,848	163	30	24	19	236
April	...	...	34	1,661	263	70	57	27	417
May	...	...	22	1,080	28	4	5	...	37
June	...	...	17	1,011	500	81	38	37	656
July	...	...	22	1,281	319	26	25	15	385
August	...	...	20	873	356	78	25	29	488
September	...	..	12	837	278	65	31	22	396
October	...	...	12	822	189	48	43	31	311
November	...	...	12	818	187	47	33	32	299
December	...	...	13	870	643	31	20	15	709
Total	...	...	251	14,035	3,155	545	339	256	4,295

*Vessels inspected during the year 1948.*

tion.								Result of Inspection			
European crew. (9)	Saloon passengers.					Passes to relations and friends. (15)	Baggage coolies. (16)	Temperature.		Allowed on medi- cal certificate or at Commanders' request. (19)	Cases detained. (20)
	Male. (10)	Female. (11)	Boys. (12)	Girls. (13)	Total. (14)			Tested. (17)	Normal. (18)		
908	130	117	33	50	330	...	...	...	...	...	...
491	116	41	11	8	176	...	...	...	...	...	...
652	42	37	9	4	92	...	...	...	...	...	...
508	75	67	23	28	193	...	...	...	...	...	...
382	114	97	17	31	259	...	...	...	...	...	...
306	113	50	31	19	213	...	...	...	...	...	...
356	38	26	14	6	84	...	...	...	...	...	...
381	85	64	25	19	193	...	...	...	...	...	...
209	102	85	41	42	270	...	...	...	...	...	...
216	54	48	21	19	142	...	...	...	...	...	...
157	49	26	16	18	109	...	...	...	...	...	...
200	89	63	31	17	200	...	...	1	...	...	1
4,766	1,007	721	272	261	2,261	...	...	1	...	...	1



TABLE NO. II.—*Details of Out-going Sea-going*

Months.	(1)	Inspection						
		No. of vessels.	Asiatic crew.	Deck passengers.				
				Male.	Female.	Boys.	Girls.	Total.
		(2)	(3)	(4)	(5)	(6)	(7)	(8)
TO INDIAN PORTS, 1948.								
January ...	...	25	2,392	7,573	972	371	333	9,249
February ...	...	24	1,703	4,446	518	228	245	5,437
March ...	...	28	1,986	5,953	706	279	272	7,210
April ...	...	24	1,670	6,202	654	229	331	7,416
May ...	...	26	1,473	5,860	511	168	249	6,788
June ...	...	26	1,760	3,934	384	172	215	4,705
July ...	...	24	1,891	3,310	194	66	79	3,649
August ...	...	23	1,734	2,177	133	49	63	2,422
September ...	...	16	1,207	4,470	286	118	129	5,003
October ...	...	15	1,317	4,039	352	172	187	4,750
November ...	...	19	1,410	3,228	271	131	155	3,785
December ...	...	18	1,248	3,451	282	129	153	4,015
Total ...	...	268	19,791	54,643	5,263	2,112	2,411	64,429

## Vessels inspected during the year 1948—contd.

tion.								Result of Inspection.			
European crew. (9)	Saloon passengers.					Passes to relations and friends. (15)	Baggage coolies. (16)	Temperature.		Allowed on medi- cal certificate or at Commanders' request. (19)	Cases detained. (20)
	Male. (10)	Female. (11)	Boys. (12)	Girls. (13)	Total. (14)			Tested. (17)	Normal. (18)		
265	230	150	52	55	487	...	...	8	1	...	7
517	187	77	54	39	357	...	...	7	...	1	6
518	239	117	46	46	448	...	...	4	...	4	...
589	168	92	34	25	319	...	...	4	...	2	2
531	194	65	39	25	323	...	...	3	...	...	3
625	168	40	26	20	254	...	...	...	...	...	...
438	119	33	14	11	177	...	...	2	...	...	2
419	130	68	25	20	243	...	...	1	...	1	...
294	104	66	24	24	218	...	...	2	...	1	1
278	142	79	42	28	291	...	...	...	...	...	...
382	123	47	26	25	221	...	...	2	...	...	2
366	138	84	22	23	267	...	...	4	...	1	3
5,222	1,942	918	404	341	3,605	...	...	37	1	10	26



TABLE No. II.—*Details of Out-going Sea-going*

Months			Diseases.				Disposal			
			T.B.	Mumps.	Measles.	Chicken-pox.	Civil General Hospital.	Municipal Observation Hospital.	Contagious Diseases Hospital.	Passengers' residence.
(1)			(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
To FOREIGN PORTS, 1948.										
January	...	...	1	..	...	...	...	..	...	...
February	...	...	...	...	...	...	..	..	...	...
March	...	...	...	...	...	...	...	...	...	...
April	...	...	...	...	..	...	...	...	...	...
May	...	...	...	...	...	...	...	...	...	...
June	...	...	...	...	..	...	...	...	...	...
July	...	...	...	...	...	...	...	...	...	..
August	...	...	...	...	...	...	...	...	...	...
September	...	...	...	...	...	...	...	...	...	...
October	...	...	...	...	...	...	...	...	...	...
November	...	...	...	...	...	...	...	...	...	...
December	...	...	...	...	1	...	...	...	1	...
Total	...	...	1	...	1	...	...	...	1	..

*Vessels inspected during the year 1948—contd.*

[illegible]



TABLE NO. II.—*Details of Out-going Sea-going*

Months.			Diseases.					Disposal			
			T.B.	Chicken-pox.	Measles.	Small-pox.	Mumps.	Fever cases.	Civil General Hospital	Municipal Observation Hospital.	Contagious Diseases Hospital.
(1)			(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
To INDIAN PORTS, 1948.											
January	...	...	1	...	...	...	...	8	...	...	...
February	...	...	...	5	...	...	...	7	...	6	5
March	...	...	...	2	...	...	...	4	...	...	2
April	...	...	1	3	2	1	...	4	...	3	6
May	...	...	1	2	...	...	1	3	...	1	3
June	...	...	4	...	...	...	...	...	...	...	...
July	...	...	2	...	...	...	...	2	...	...	...
August	...	...	2	...	...	...	...	1	...	...	...
September	...	...	1	...	...	...	...	1	...	...	...
October	...	...	4	...	...	...	...	2	...	...	...
November	...	...	...	...	...	...	...	2	...	...	...
December	...	...	...	...	...	...	...	4	...	...	...
Total	...	...	16	12	2	1	1	38	...	10	16

*Vessels inspected during the year 1948—concl'd.*

of sick		Disinfection.				Fumigation by means of sulphur trays at agent's request.				Vaccination.	
Passengers' residence.	Allowed to travel on ship's surgeons undertaking.	Asiatic crew and deck passengers.	Boots and shoes.	Baggage coolies.	Boxes.	Vessels.	Sulphur consumed.	Time spent.	Amount realized and fees.	Crew.	Passengers.
(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)
							lb.		Rs.		
7	2	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	1	1,366	...	350	...	...
...	4	...	...	...	...	1	300	...	200	...	125
...	2	...	...	...	...	...	...	...	...	...	90
2	1	...	...	...	...	1	650	...	275	...	...
..	4	...	...	...	...	1	511	...	200	...	42
4	...	...	...	...	...	...	...	...	...	...	...
2	1	...	...	...	...	...	...	...	...	...	...
1	1	...	...	...	...	...	..	...	...	...	...
1	5	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...
3	1	...	...	...	...	...	...	...	...	...	...
22	22	...	...	...	...	4	2,827	...	1,025	...	257



TABLE NO. III.—Statement showing the Infectious and other Diseases reported

Diseases.			In-coming Sea-going.				Riverine.		Imports.	
			No. of vessels.	Cases.			No. of vessels.	No. of cases.	No. of vessels.	No. of cases.
				Total.	Reported.	Detected.				
(1)			(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Small-pox	...	...	2	2	1	1	1	1	...	...
Plague	...	...	1	1	1	...	...	...	...	...
Cholera	...	...	2	2	2	...	...	...	...	...
Chicken-pox	...	...	6	7	4	3	1	1	...	...
Measles	...	...	4	23	23	...	...	...	...	...
Mumps	...	...	...	...	...	...	1	1	...	...
T.B.	...	...	2	2	2	...	...	...	...	...
Ordinary Fever	...	...	19	43	12	31	...	...	...	...
Ordinary deaths	...	...	4	5	5	...	9	9	...	...
Pneumonia	...	...	3	3	2	1	...	...	...	...
Gastritis	...	...	1	1	...	1	...	...	...	...
Wet Beri-Beri	...	...	1	1	1	...	...	...	...	...
Gastro enteritis	...	...	...	...	...	...	1	1	...	...
Suicide	...	...	1	1	1	...	...	...	...	...
Venereal	...	...	1	1	1	...	...	...	...	...
Duodenal ulcer	...	...	...	...	...	...	...	...	1	1
High Blood Pressure	...	...	1	1	1	...	...	...	...	...
Total	...	...	48	93	56	37	13	13	1	1

and detected on In-coming Sea-going and Riverine Vessels during the year 1948.

Disposal of cases.										Corpses.				
Hospitals.					Residence.	Left on board.	Left at other Ports.	Other Hospitals.	Total.	Buried at sea.	Rangoon Mortuary.	Buried by relatives.	Total.	Remarks.
C.D.H.	M.O.H.	Rangoon General Hospital.	Military.	Leper.										
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
3	...	...	...	...	...	...	...	...	3	...	...	...	...	Died in hospital.
1	...	...	...	...	...	...	...	...	1	...	...	...	...	
1	...	...	...	...	...	...	...	...	1	1	...	...	1	
7	...	...	...	...	...	1	...	...	8	...	...	...	...	
9	...	...	...	...	9	5	...	...	23	...	...	...	...	
1	...	...	...	...	...	...	...	...	1	...	...	...	...	Captain of Ship Died in hospital.
...	...	...	...	...	1	1	...	...	2	...	...	...	...	
1	28	...	...	...	9	5	...	...	43	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	4	1	9	14	
...	2	1	...	...	...	...	...	...	3	...	...	...	...	
1	...	...	...	...	...	...	...	...	1	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	
1	...	...	...	...	...	...	...	...	1	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	...	...	...	...	...	1	...	...	1	...	...	...	...	
...	...	1	...	...	...	...	...	...	1	...	...	...	...	
...	...	...	...	...	...	1	...	...	1	...	...	...	...	
25	30	2	...	...	19	14	...	...	90	5	1	11	17	

## Statement showing the flying boats' passengers inspected by the

Months.			Flying Boats.		Passengers disembarked at Rangoon									
			E.	W.	From Indian Ports.					From Foreign Ports.				
					M.	F.	B.	G.	Total.	M.	F.	B.	G.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
1948.														
January	...	...	23	23	34	1	...	...	35	90	8	...	...	98
February	...	...	20	23	26	3	...	...	29	109	6	...	...	115
March	...	...	23	20	32	2	1	...	35	94	12	5	...	111
April	...	...	21	21	27	3	...	1	31	56	8	1	2	67
May	...	...	20	21	34	9	...	2	45	61	7	...	...	68
June	...	...	18	22	19	3	1	1	24	65	7	...	...	72
July	...	...	20	21	28	2	2	...	32	71	10	...	...	81
August	...	...	22	22	25	1	3	...	29	60	4	1	...	65
September	...	...	21	22	24	4	...	...	28	51	8	...	...	59
October	...	...	21	23	21	2	...	...	23	56	12	...	1	69
November	...	...	22	20	21	5	...	...	26	57	18	5	1	81
December	..	...	19	19	20	5	2	...	27	55	17	1	1	74
Total	...	...	250	257	311	40	9.	4	364	825	117	13	5	960



*Port Health Department, Rangoon, during the year 1948.*

Through passengers					Total number of passengers					Action taken
Examined.					Examined.					
M.	F.	B.	G.	Total.	M.	F.	B.	G.	Total.	
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
420	132	1	1	554	544	141	1	1	687	
395	154	2	...	551	530	163	2	...	695	
454	171	6	2	633	580	185	12	2	779	
472	178	6	8	664	555	189	7	11	762	
424	205	3	8	640	519	221	3	10	753	
394	188	12	2	596	478	198	13	3	692	
335	147	21	10	513	434	159	23	10	626	
417	164	24	13	618	502	169	28	13	712	
378	179	17	6	580	453	191	17	6	667	
387	178	14	8	587	464	192	14	9	679	
339	154	19	13	525	417	177	24	14	632	
337	151	35	16	539	412	173	38	17	640	
4,752	2,001	160	87	7,000	5,888	2,158	182	96	8,324	

## Statement showing the number of rats caught and the number

Months.			Number of rats caught and destroyed.	Number of rats examined.	Of the total	
					Nesokia Bengalensis.	R. Norvi- gicus.
(1)			(2)	(3)	(4)	(5)
1948.						
January	...	...	664	640	506	14
February	...	...	537	510	388	9
March	...	...	624	497	356	11
April	...	...	558	430	323	19
May	...	...	666	639	430	28
June	...	...	637	637	403	34
July	...	...	603	558	320	23
August	...	...	560	559	287	21
September	...	...	697	673	255	28
October	...	...	601	562	202	7
November	...	...	640	576	225	9
December	...	...	743	665	346	3
Total for the year 1948			7,530	6,946	4,041	206

*examined for B. Pestis in the Port of Rangoon during the year 1948.*

examined.				Number found positive for B. Pestis.	Remarks as to the number of rat traps laid, the number caught, nature of baits used, etc.
Rattus Rattus.	Mus Con- color.	Mus Musc.	C. Coc- rulia.		
(6)	(7)	(8)	(9)	(10)	(11)
49	15	8	48	Nil	43,007 traps set during the year 1948.
38	19	11	45	Nil	Baits used—Bread.
48	20	20	42	Nil	Total rats caught—
					Trapping ... 7,386
17	3	27	41	Nil	Smoking ... 49
34	16	64	67	Nil	Cynag Fumigation 95
					Total ... <u>7,530</u>
29	3	92	76	Nil	
23	34	66	92	Nil	
37	66	82	66	Nil	
47	95	119	129	Nil	
54	82	84	133	Nil	
34	92	101	115	Nil	
25	69	94	128	Nil	
435	514	768	982	Nil	



## ANNUAL STATEMENT NO. IV-A.—Deaths registered according to Ages and Sexes in the

1	2	3		4		5		6		7	
No.	Divisions and Towns.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.	
		Males.	Females	Males.	Females	Males.	Females	Males.	Females	Males.	Females.
	ARAKAN DIVISION.										
1	Akyab ...	51	49	7	10	2	8	9	1	15	12
	PEGU DIVISION.										
2	Rangoon ...	2,279	1,899	710	745	183	173	103	117	125	142
3	Pegu ...	122	87	46	54	13	14	12	11	16	17
4	Letpadan ...	41	31	12	11	3	4	4	4	3	1
5	Syriam ...	62	34	12	20	5	5	5	3	13	12
6	Insein ...	102	64	24	24	3	12	9	6	6	7
7	Prome ...	...	...	...	...	...	...	...	...	...	...
8	Paungdè ...	...	...	...	...	...	...	...	...	...	...
	IRRAWADDY DIVISION.										
9	Bassein ...	383	290	78	77	30	20	21	12	24	21
10	Henzada ...	...	...	...	...	...	...	...	...	...	...
11	Pyapôn ...	18	18	11	11	8	7	6	10	8	6
12	Kyaiklat ...	80	65	33	24	5	14	7	4	11	3
	TENASSERIM DIVISION.										
13	Thatôn ...	77	59	48	55	21	18	5	8	7	9
14	Moulmein ...	282	221	218	190	66	76	23	22	23	30
15	Tavoy ...	26	16	25	26	15	12	15	12	7	13
16	Mergui ...	...	...	...	...	...	...	...	...	...	...
17	Toungoo ...	17	12	14	14	5	4	5	1	5	3
	MAGWE DIVISION.										
18	Allanmyo ...	40	20	14	19	6	5	2	4	6	4
19	Yenangyaung ...	66	58	25	31	10	6	8	5	11	6
20	Chauk ...	24	27	18	16	9	3	7	3	5	8
21	Pakôkku ...	...	...	...	...	...	...	...	...	...	...
	MANDALAY DIVISION.										
22	Mandalay ...	1,108	1,070	651	679	172	197	47	52	56	55
23	Maymyo ...	77	61	25	18	10	6	1	5	6	9
24	Myingyan ...	177	152	80	66	23	8	6	4	6	6
25	Pyinmana ...	78	74	24	33	17	8	5	12	11	11
	SAGAING DIVISION.										
26	Shwebo ...	45	40	8	11	15	5	13	9	15	19
27	Sagaing ...	79	65	21	18	3	15	7	13	10	8
28	Mônnya ...	115	106	53	45	8	9	6	4	8	6
	Total of Towns, Burma.	5,348	4,518	2,157	2,197	632	629	326	322	397	408

*Towns of Burma having a population of 10,000 and above, during the year 1948.*

8		9		10		11		12		13		1
20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		Total (all ages).		No.
Males	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
40	25	51	22	43	11	32	13	34	33	284	184	1
631	551	837	488	777	398	675	346	949	747	7,269	5,606	2
47	45	71	31	82	32	41	21	68	55	518	367	3
16	12	20	18	16	8	6	9	20	9	141	107	4
36	29	39	23	36	31	30	16	45	29	283	202	5
24	28	27	23	30	23	27	17	20	16	272	220	6
...	...	...	...	...	...	...	...	...	...	...	...	7
...	...	...	...	...	...	...	...	...	...	...	...	8
72	73	55	72	84	64	87	55	130	98	964	782	9
...	...	...	...	...	...	...	...	...	...	...	...	10
31	17	18	16	29	19	22	6	38	24	189	134	11
15	20	23	14	24	16	25	14	34	32	257	206	12
21	17	30	24	25	18	26	21	63	47	323	276	13
88	90	104	96	90	74	96	63	162	109	1,152	971	14
35	37	45	33	56	27	42	22	51	50	316	248	15
...	...	...	...	...	...	...	...	...	...	...	...	16
23	18	28	14	38	17	19	23	24	28	178	134	17
9	12	17	16	13	15	13	8	17	15	137	118	18
36	21	31	17	35	7	13	16	41	24	276	191	19
10	13	12	14	12	8	7	8	15	20	119	120	20
...	...	...	...	...	...	...	...	...	...	...	...	21
190	127	180	146	183	126	154	107	207	241	2,948	2,800	22
21	19	26	15	25	13	24	10	27	27	242	183	23
33	24	24	26	23	20	26	12	42	40	440	358	24
38	26	38	22	26	19	22	26	35	41	294	272	25
18	17	16	15	18	15	21	11	9	7	178	149	26
34	24	23	26	36	23	22	13	29	26	264	231	27
17	13	17	21	17	12	19	12	23	32	283	260	28
1,485	1,258	1,732	1,192	1,718	996	1,449	849	2,083	1,750	17,327	14,119	

**SUPPLEMENTARY ANNUAL STATEMENT NO. IA.—***Giving the Details of  
of 10,000 and above*

Serial No.	Divisions and Towns.	Not exceeding one month.							Total of Columns 5 and 8.
		Male.			Female.				
		Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	ARAKAN DIVISION.								
1	Akyab ... ..	6	3	9	5	7	12	21	
	PEGU DIVISION.								
2	Rangoon ... ..	625	365	990	469	319	788	1,178	
3	Pegu ... ..	33	12	45	19	7	26	71	
4	Letpadan ... ..	4	6	10	8	...	8	18	
5	Syriam ... ..	19	9	28	13	3	16	44	
6	Insein ... ..	20	6	35	17	7	24	59	
7	Prome ... ..	...	..	...	...	...	...	...	
8	Paungdè ... ..	...	...	...	...	...	...	...	
	IRRAWADDY DIVISION.								
9	Bassein ... ..	83	26	109	46	17	63	172	
10	Henzada ... ..	...	...	...	...	...	...	...	
11	Pyapôn ... ..	1	1	2	...	...	...	2	
12	Kyaiklat ... ..	16	13	29	14	5	19	48	
	TENASSERIM DIVISION.								
13	Thatôn ... ..	15	12	27	17	5	22	49	
14	Moulmein ... ..	65	43	108	59	18	77	185	
15	Tavoy ... ..	...	1	1	...	1	1	2	
16	Mergui ... ..	...	...	...	...	...	...	...	
17	Toungoo ... ..	4	3	7	2	3	5	12	
	MAGWE DIVISION.								
18	Allanmyo ... ..	11	5	16	2	2	4	20	
19	Yenangyaung ... ..	10	10	20	9	1	10	30	
20	Chauk ... ..	3	2	5	5	3	8	13	
21	Pakòkku ... ..	..	...	...	...	...	...	...	
	MANDALAY DIVISION.								
22	Mandalay ... ..	239	113	352	230	99	329	681	
23	Maymyo ... ..	24	14	38	20	14	34	72	
24	Myingyan ... ..	49	16	65	25	14	39	104	
25	Pyinmana ... ..	22	2	24	20	7	27	51	
	SAGAING DIVISION.								
26	Shwebo ... ..	13	8	21	12	10	22	43	
27	Sagaing ... ..	18	15	33	10	6	16	49	
28	Mônýwa ... ..	39	7	46	28	5	33	79	
	Total of Towns, Burma...	1,328	692	2,020	1,030	553	1,583	3,601	
	Ratio per mille of births for last 3 columns only.								



Deaths by Ages and Sexes under one year in the Towns having a population \_\_\_\_\_ during the year 1948.

Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total Male, columns 5 10 and 13.	Total Female, columns 8, 11 and 14.	Total.	No.
Male.	Female.	Total.	Male	Female.	Total.				
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(1)
26	25	51	16	12	28	51	49	100	1
979	820	1,799	310	291	601	2,279	1,899	4,178	2
66	44	110	11	17	28	122	87	209	3
25	21	46	6	2	8	41	31	72	4
28	13	41	6	5	11	62	34	96	5
41	34	75	26	6	32	102	64	166	6
...	...	...	...	...	...	...	...	...	7
...	...	...	...	...	...	...	...	...	8
242	189	431	32	38	70	383	290	673	9
...	...	...	...	...	...	...	...	...	10
12	12	24	4	6	10	18	18	36	11
45	40	85	6	6	12	80	65	145	12
38	27	65	12	10	22	77	59	136	13
122	97	219	52	47	99	282	221	503	14
17	10	27	7	5	12	25	16	41	15
...	...	...	...	...	...	...	...	...	16
8	5	13	2	2	4	17	12	29	17
19	14	33	5	2	7	40	20	60	18
32	42	74	14	6	20	66	58	124	19
13	7	20	6	12	18	24	27	51	20
...	...	...	...	...	...	...	...	...	21
496	430	926	260	311	571	1,108	1,070	2,178	22
29	20	49	10	7	17	77	61	138	23
80	78	158	32	35	67	177	152	329	24
42	35	77	12	12	24	78	74	152	25
13	5	18	11	3	24	45	40	85	26
36	34	70	10	15	25	79	65	144	27
53	49	102	16	24	40	115	106	221	28
2,462	2,051	4,513	866	884	1,750	5,348	4,518	9,866	
						280.26	256.09	268.65	

ANNUAL STATEMENT NO. II-A.—Births and Deaths registered from

1	2	3	4				5	6	7	8	9	10		
No.	Divisions and Towns.	Population (Census 1931).	Births.			Birth rate.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.	Suicide.	
			Male.	Female.	Total.								Male.	Female.
ARAKAN DIVISION.														
1	Akyab ...	38,094	238	239	477	12·52	4	1	...	36	20	62	3	1
2	Kyaukpyu ...	4,232	87	90	183	43·24	...	...	...	11	4	4	1	...
3	Sandoway ...	4,070	57	65	122	29·98	...	...	...	12	1	14	...	...
PEGU DIVISION.														
4	Rangoon ...	398,967	8,263	7,657	15,920	39·90	1	193	10	428	515	3,499	7	1
5	Pegu ...	21,626	378	347	725	33·52	...	5	1	93	31	101	...	...
6	Nyaunglebint†	7,790	...	...	...	...	...	...	...	...	...	...	...	...
7	Tharrawaddy ...	7,131	99	82	181	25·38	...	1	1	20	4	18	...	...
8	Thônzè ...	7,962	133	126	259	32·53	...	...	...	17	4	28	1	...
9	Zigôn* ...	6,365	93	85	178	27·97	...	...	...	21	7	22	1	...
10	Letpadan* ...	12,160	174	163	337	27·71	...	2	...	25	15	17	...	...
11	Gyobingauk ...	7,675	132	115	247	32·13	...	1	...	44	4	7	...	...
12	Minhla* ...	4,413	74	54	128	29·01	...	...	8	16	1	9	...	...
13	Nattalin* ...	5,633	72	63	135	23·96	...	...	1	13	...	10	...	1
14	Syriam ...	15,070	354	325	679	45·06	...	...	...	19	6	108	...	...
15	Thôngwat†	8,976	...	...	...	...	...	...	...	...	...	...	...	...
16	Insein ...	20,487	327	300	627	30·60	...	...	...	61	34	72	...	...
17	Thamaing ...	5,645	106	101	207	36·67	...	...	...	28	...	11	...	...
18	Kamayut ...	7,256	213	200	413	56·92	...	...	...	130	4	6	...	...
19	Thingangyun ...	7,984	175	156	331	41·46	...	...	...	41	1	6	...	...
20	Kanbe ...	6,575	163	139	302	45·93	...	...	...	67	1	4	...	...
21	Promet†	28,295	...	...	...	...	...	...	...	...	...	...	...	...
22	Shwedaung ...	8,408	...	...	...	...	...	...	...	...	...	...	...	...
23	Paungdè ...	13,479	...	...	...	...	...	...	...	...	...	...	...	...
24	Toungoo* ...	23,223	275	214	489	21·06	...	...	1	44	18	40	...	...
25	Shwegyi†	5,876	...	...	...	...	...	...	...	...	...	...	...	...
26	Pyu* ...	7,807	204	212	416	53·29	...	...	1	55	18	48	1	...
IRRAWADDY DIVISION.														
27	Bassein ...	45,662	1,043	955	1,998	43·76	...	...	...	203	92	418	...	...
28	Ngathainggyaung ...	5,380	...	...	...	...	...	...	...	...	...	...	...	...
29	Kyônpyaw†	5,866	...	...	...	...	...	...	...	...	...	...	...	...
30	Henzada†	28,542	...	...	...	...	...	...	...	...	...	...	...	...
31	Myanaung†	9,072	...	...	...	...	...	...	...	...	...	...	...	...
32	Kyangin* ...	6,780	51	60	111	16·37	...	...	...	21	1	17	...	...
33	Myaungmya ...	7,933	234	220	454	57·23	...	...	3	69	25	75	1	...
34	Wakèma ...	9,359	146	143	289	30·88	...	1	...	78	8	25	1	...
35	Moulmeingyūn ...	7,747	135	133	268	34·59	...	54	9	97	14	35	...	...
36	Maubin ...	8,897	216	182	398	44·73	...	...	...	125	14	16	2	...
37	Yandoon ...	9,925	...	...	...	...	...	...	...	...	...	...	...	...
38	Danubyu ...	6,334	129	149	278	43·89	...	...	12	47	10	33	...	...
39	Pyapôn ...	12,338	244	221	465	37·69	...	...	4	51	17	41	1	...
40	Kyaiklât ...	10,658	217	181	398	37·34	2	...	15	92	31	77	...	...
TENASSERIM DIVISION.														
41	Thatôn ...	16,851	402	408	810	48·07	...	...	...	186	33	53	...	...
42	Kyaikto†	6,611	...	...	...	...	...	...	...	...	...	...	...	...
43	Moulmein ...	65,506	1,114	956	2,070	31·60	...	109	...	224	99	398	3	...



*different causes in the Towns of Burma during the year 1948.*

11					12	13	14											1
Injuries.					All other causes.	Total deaths from all causes.	Ratio of Deaths per 1,000 population											No.
Wounding or accident.	Snake-bite.	Killed by wild beasts	Rabies.	Total.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.	Injuries.	All other causes.	From all causes.			
															For the year.	Mean of previous five years.		
34	...	...	4	42	303	468	0·11	0·03	...	0·95	0·53	1·63	0·10	7·95	12·29	...	1	
6	...	...	...	7	39	65	...	...	...	2·60	0·95	0·95	1·65	9·22	15·36	...	2	
3	...	...	...	3	37	67	...	...	...	2·95	0·25	3·44	0·74	9·09	16·46	...	3	
352	6	...	4	370	7,859	12,875	0·00	0·48	0·03	1·07	1·29	8·77	0·93	19·70	32·27	...	4	
122	1	...	1	124	530	885	...	0·23	0·05	4·30	1·43	4·67	5·73	24·51	40·92	...	5	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	
19	...	...	...	19	92	155	...	0·14	0·14	2·80	0·56	2·52	2·66	12·90	21·74	...	7	
4	...	...	...	5	104	158	...	...	...	2·14	0·50	3·52	0·63	13·06	19·84	...	8	
7	...	...	...	8	62	120	...	...	...	3·30	1·10	3·46	1·26	9·74	18·85	...	9	
32	1	...	...	33	156	248	...	0·16	...	2·06	1·23	1·40	2·71	12·83	20·39	...	10	
9	...	...	...	9	148	213	...	0·13	...	5·73	0·52	0·91	1·17	19·28	27·75	...	11	
5	1	...	...	6	37	77	...	...	1·81	3·62	0·23	2·04	1·36	8·38	17·44	...	12	
1	...	1	...	3	43	70	...	...	0·18	2·31	..	1·78	0·53	7·63	12·43	...	13	
69	2	...	...	71	281	485	...	...	...	1·26	0·40	7·17	4·71	18·65	32·18	...	14	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	
15	...	...	...	15	310	492	...	...	...	2·98	1·66	3·51	0·73	15·13	24·01	...	16	
...	...	...	...	...	159	198	...	...	...	4·96	...	1·95	...	28·17	35·08	...	17	
4	...	...	...	4	259	403	...	...	...	17·92	0·55	0·83	0·55	35·69	55·54	...	18	
1	3	...	1	5	252	305	...	...	...	5·14	0·13	0·75	0·63	31·56	38·20	...	19	
4	1	...	...	5	240	317	...	...	...	10·19	0·15	0·61	0·76	36·50	48·21	...	20	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23	
24	...	...	1	25	184	312	...	...	0·04	1·89	0·78	1·72	1·08	7·92	13·43	...	24	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25	
48	1	...	1	51	100	273	...	...	0·13	7·04	2·31	6·15	6·53	12·81	34·97	...	26	
37	1	...	4	42	991	1,746	...	...	...	4·45	2·01	9·15	0·92	21·70	38·24	...	27	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31	
1	...	...	..	1	27	67	...	...	...	3·10	0·15	2·51	0·15	3·98	9·88	...	32	
8	...	...	...	10	289	471	...	...	0·38	8·70	3·15	9·45	1·26	36·43	59·37	...	33	
49	2	...	1	53	212	377	...	0·11	...	8·33	8·85	2·67	5·66	22·65	49·28	...	34	
27	...	...	...	27	235	471	...	6·97	1·16	12·52	1·81	4·52	3·49	30·33	60·80	...	35	
26	...	...	...	28	151	334	...	...	...	14·05	1·46	1·80	3·14	16·97	37·54	...	36	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37	
14	1	...	...	15	117	234	...	...	1·89	7·42	1·58	5·21	2·37	18·47	36·94	...	38	
50	2	...	...	53	157	323	...	...	0·32	4·13	1·38	3·32	4·30	12·72	26·18	...	39	
16	...	...	...	16	230	463	0·19	...	1·41	8·63	2·91	7·22	1·50	21·58	43·44	...	40	
17	...	...	...	17	310	599	...	...	...	11·04	1·96	3·15	1·01	18·40	35·55	...	41	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	42	
74	1	2	...	80	1,213	2,123	...	1·66	...	3·42	1·51	6·08	1·22	18·52	32·41	...	43	



## ANNUAL STATEMENT NO. II-A.—Births and Deaths registered from

1	2	3	4				5	6	7	8	9	10	Suicide.	
No.	Divisions and Towns.	Population (Census 1931).	Births.										Respiratory Diseases.	
			Male.	Female.	Total.	Birth rate.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.		Male.	Female.
TENASSERIM DIVISION. —concl'd.														
44	Kawkareik ...	6,575	...	...	...	...	...	...	...	...	...	...	...	...
45	Tavoy† ...	29,018	357	312	669	23·05	...	...	...	326	2	35	...	...
46	Merguit ...	20,405	...	...	...	...	...	...	...	...	...	...	...	...
MAGWE DIVISION.														
47	Thayetinyo* ...	9,279	129	129	258	27·80	...	...	2	34	1	6	...	...
48	Allanmyo* ...	12,511	190	173	363	29·01	...	...	15	35	10	57	...	...
49	Minbu† ...	6,005	...	...	...	...	...	...	...	...	...	...	...	...
50	Salin ...	6,654	109	105	214	32·16	...	...	51	46	8	35	1	...
51	Magwe* ...	8,209	128	81	209	25·46	...	...	1	16	13	48	...	...
52	Taungdwingyi* ...	8,339	211	198	409	49·05	...	...	7	75	17	111	1	...
53	Yenangyaung* ...	11,098	253	209	462	41·63	...	6	6	67	32	76	...	...
54	Chauk ...	12,830	75	67	142	11·07	...	...	3	72	...	7	1	...
55	Pakôkku† ...	23,115	...	...	...	...	...	...	...	...	...	...	...	...
MANDALAY DIVISION.														
56	Mandalay ...	134,950	3,237	3,113	6,350	47·05	...	457	14	648	170	1058	4	...
57	Maymyo* ...	16,586	531	447	978	58·97	...	12	...	42	18	120	2	1
58	Myitnge* ...	5,682	70	61	131	23·06	...	...	...	3	...	5	...	...
59	Kyaukse* ...	7,353	108	111	219	29·78	...	9	4	31	...	11	...	...
60	Meiktila* ...	8,830	...	...	...	...	...	...	...	...	...	...	...	...
61	Myingyan* ...	25,457	462	447	909	35·71	...	40	...	11	39	155	...	...
62	Nyaung-U* ...	8,118	93	101	194	23·90	...	...	1	9	5	13	...	...
63	Yamèthin ...	9,291	92	77	169	18·19	...	33	26	17	1	31	...	...
64	Pyinmana* ...	17,656	258	245	503	28·49	1	24	46	44	22	51	...	...
65	Pyawbwè* ...	5,783	123	113	236	40·80	...	...	17	27	3	9	...	...
SAGAING DIVISION.														
66	Shwebo ...	11,286	235	218	453	40·14	...	20	11	54	4	15	...	1
67	Ye-U* ...	3,739	84	87	171	45·73	...	8	2	27	4	5	...	...
68	Sagaing ...	14,127	215	215	430	30·43	...	7	15	58	9	65	...	...
69	Myinmu* ...	5,072	98	84	182	35·88	...	...	2	21	3	17	...	...
70	Mônnywa ...	10,800	240	230	470	43·52	...	12	6	89	22	151	...	...
Total ...		11,84,278	22,846	21,170	44,016	37·17	8	995	295	4,126	1,415	7,355	31	5
TOWNS WHICH ARE NOT INCLUDED IN THE MAIN STATEMENT														
1	Bhamo ...	8,011	119	92	211	26·34	...	1	...	37	7	21	...	...
2	Myitkyina ...	7,328	152	121	273	37·25	...	...	...	63	7	51	...	...
3	Mawlaik ...	2,278	32	42	74	32·48	...	...	...	13	...	5	...	...
4	Lashio ...	4,638	119	124	243	52·39	...	...	3	65	6	28	...	...
5	Taunggyit ...	8,652	...	...	...	...	...	...	...	...	...	...	...	...
6	Kalaw ...	3,621	80	89	169	46·67	...	...	9	3	1	9	...	...

\* Figures compiled from  
† Annual Report

different causes in the Towns of Burma during the year 1948—concl'd.

11					12	13	14												1
Injuries.					All other causes.	Total deaths from all causes.	Ratio of Deaths per 1,000 population.												No.
Wounding or accident.	Snake-bite.	Killed by wild beasts.	Rabies.	Total.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.	Injuries.	All other causes.	From all causes.				
															For the year.	Mean of previous five years.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44	
17	...	...	...	17	184	564	...	...	...	11.23	0.07	1.21	0.59	6.34	19.43	...	...	45	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46	
7	...	...	...	7	199	249	...	...	0.22	3.66	0.11	0.65	0.75	21.45	26.83	...	...	47	
4	1	...	1	6	132	255	...	...	1.20	2.80	0.80	4.56	0.48	10.55	20.38	...	...	48	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	49	
7	...	...	1	9	103	252	...	...	7.66	6.91	1.20	5.26	1.35	15.48	37.87	...	...	50	
4	2	...	1	7	111	196	...	...	0.12	1.95	1.58	5.85	0.85	13.52	23.88	...	...	51	
18	...	1	1	21	132	363	...	...	0.84	8.99	2.04	13.31	2.52	15.83	43.53	...	...	52	
37	...	...	1	38	242	467	...	0.54	0.54	6.04	2.88	6.85	3.42	21.81	42.08	...	...	53	
13	1	...	1	16	141	239	...	...	0.23	5.61	...	0.55	1.25	10.99	18.63	...	...	54	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55	
87	6	...	1	98	3,303	5,748	...	3.39	0.10	4.80	1.26	7.84	0.72	24.48	42.59	...	...	56	
28	...	...	...	31	202	425	...	0.72	...	2.53	1.09	7.24	1.87	12.18	25.62	...	...	57	
1	...	...	...	1	18	27	...	...	...	0.53	...	0.88	0.18	3.17	4.75	...	...	58	
11	...	...	...	11	102	168	...	1.22	0.54	4.22	...	1.50	1.50	13.87	22.85	...	...	59	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	60	
28	3	...	1	32	521	798	...	1.57	...	0.43	1.53	6.09	1.26	20.47	31.35	...	...	61	
4	...	...	...	4	131	163	...	...	0.12	1.11	0.62	1.60	0.49	16.13	20.08	...	...	62	
6	...	...	...	6	70	184	...	3.55	2.80	1.83	0.11	3.33	0.64	7.53	19.80	...	...	63	
23	...	...	...	23	355	566	0.06	1.36	2.60	2.49	1.24	2.89	1.30	20.10	32.06	...	...	64	
6	1	...	...	7	114	177	...	...	2.93	4.67	0.51	1.56	1.21	19.71	30.60	...	...	65	
20	...	...	...	21	202	327	...	1.77	0.97	4.78	0.35	1.33	1.86	17.90	28.97	...	...	66	
...	...	...	2	2	55	163	...	2.13	0.53	7.22	1.07	1.33	0.53	14.70	27.54	...	...	67	
68	...	...	1	69	272	495	...	0.50	1.06	4.11	0.64	4.60	4.88	19.25	35.04	...	...	68	
11	...	...	...	11	76	130	...	...	0.39	4.14	0.59	3.35	2.17	14.98	25.63	...	...	69	
14	...	...	...	14	249	543	...	1.11	0.56	8.24	0.04	13.98	1.30	23.06	50.28	...	...	70	
1,492	37	4	29	1598	22,041	37,833	10.01	0.84	0.25	3.48	1.19	6.21	1.35	18.61	31.94	...	...		
6	...	...	...	6	42	114	...	0.12	...	4.62	0.87	2.62	0.75	5.24	14.23	...	...	1	
8	...	1	...	9	78	208	...	...	...	8.60	0.96	6.96	1.23	10.64	28.38	...	...	2	
6	...	...	...	6	19	43	...	...	...	5.71	...	2.19	2.63	8.34	18.88	...	...	3	
...	...	...	...	...	43	145	...	...	0.65	14.01	1.29	6.04	...	9.27	31.26	...	...	4	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	
2	...	...	...	2	11	35	...	...	2.49	0.83	0.28	2.49	0.55	3.04	9.67	...	...	6	

monthly statistics returns.  
not received.



STATEMENT II-B(a).—*Supplement to*

No.	Divisions and Towns.	Population of (Census 1931).	1		2		3		4		5		
			Malaria.		Enteric fever.		Measles.		Relapsing fever.		Kala-azar.		
			Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	
ARAKAN DIVISION.													
1	Akyab ...	38,094	1	0·03	8	0·21	...	...	...	...	5	0·13	
2	Kyaukpyu ...	4,232	...	...	1	0·24	...	...	...	...	...	...	
3	Sandoway ...	4,070	4	0·98	...	...	...	...	...	...	...	...	
PEGU DIVISION.													
4	Rangoon ...	3,98,967	292	0·73	73	0·18	...	...	...	...	...	...	
5	Pegu ...	21,626	52	2·40	8	0·37	...	...	...	...	...	...	
6	Nyaunglebin ...	7,790	...	...	...	...	...	...	...	...	...	...	
7	Tharrawaddy ...	7,131	9	1·26	1	0·14	...	...	...	...	...	...	
8	Thônzè ...	7,962	17	2·14	...	...	...	...	...	...	...	...	
9	Zigôn ...	6,365	19	2·99	1	0·16	...	...	...	...	...	...	
10	Letpadan ...	12,160	21	1·73	3	0·25	...	...	...	...	...	...	
11	Gyobingauk ...	7,575	23	3·00	...	...	...	...	...	...	...	...	
12	Minhla ...	4,413	6	1·36	2	0·45	...	...	...	...	...	...	
13	Nattalin ...	5,633	2	0·36	3	0·53	...	...	...	...	...	...	
14	Syriam ...	15,070	3	0·20	...	...	...	...	...	...	...	...	
15	Thôngwa ...	8,976	...	...	...	...	...	...	...	...	...	...	
16	Insein ...	20,487	23	1·12	7	0·34	...	...	...	...	...	...	
17	Thamaing ...	5,645	...	...	...	...	...	...	...	...	...	...	
18	Kamayut ...	7,256	...	...	1	0·14	1	0·14	...	...	...	...	
19	Thingangyun ...	7,984	...	...	...	...	...	...	...	...	...	...	
20	Kanbè ...	6,575	...	...	...	...	...	...	...	...	...	...	
21	Prome ...	28,295	...	...	...	...	...	...	...	...	...	...	
22	Shwedaung ...	8,408	...	...	...	...	...	...	...	...	...	...	
23	Paungdè ...	13,479	...	...	...	...	...	...	...	...	...	...	
24	Toungoo ...	23,223	30	1·29	4	0·17	...	...	...	...	1	0·04	
25	Shwegyin ...	5,876	...	...	...	...	...	...	...	...	...	...	
26	Pyu ...	7,807	52	6·66	3	0·38	...	...	...	...	...	...	
IRRAWADDY DIVISION.													
27	Bassein ...	45,662	167	3·66	23	0·50	...	...	...	...	...	...	
28	Ngathaingyaung ...	5,380	...	...	...	...	...	...	...	...	...	...	
29	Kyônpyaw ...	5,866	...	...	...	...	...	...	...	...	...	...	
30	Henzada ...	28,542	...	...	...	...	...	...	...	...	...	...	
31	Myanaung ...	9,072	...	...	...	...	...	...	...	...	...	...	
32	Kyangin ...	6,780	17	2·51	...	...	...	...	...	...	...	...	
33	Myaungmya ...	7,933	56	7·06	2	0·25	...	...	...	...	...	...	
34	Wakèma ...	9,359	73	7·80	4	0·43	...	...	...	...	...	...	
35	Moulmeingyun ...	7,747	43	5·55	...	...	1	0·13	...	...	...	...	
36	Maubin ...	8,897	2	0·22	...	...	...	...	...	...	...	...	
37	Yandoon ...	9,925	...	...	...	...	...	...	...	...	...	...	
38	Danubyu ...	6,334	23	3·61	6	0·95	...	...	...	...	...	...	
39	Pyapôn ...	12,338	25	2·03	...	...	...	...	...	...	...	...	
40	Kyaiklat ...	10,658	38	3·57	1	0·09	...	...	...	...	...	...	
TENASSERIM DIVISION.													
41	Thatôn ...	16,851	54	3·20	...	...	...	...	...	...	...	...	
42	Kyaikto ...	6,611	...	...	...	...	...	...	...	...	...	...	
43	Moulmein ...	65,506	124	1·89	67	1·02	16	0·24	...	...	...	...	
44	Kawkareik ...	6,575	...	...	...	...	...	...	...	...	...	...	





STATEMENT II-B(a).—*Supplement to*

No	Divisions and Towns.	Population (Census 1931).	Diarrhœa.		Respiratory Diseases									
			13		14		15		16		17			
			Diarrhœa.		Pneumonia.		Pulmonary Tuberculos is.		Whooping cough.		Other Respiratory Diseases.			
			Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio	Death.	Ratio.		
ARAKAN DIVISION.														
1	Akyab ...	38,094	8	0·21	31	0·81	21	0·55	...	...	10	0·26		
2	Kyaukpyu ...	4,232	2	0·47	3	0·71	...	...	...	...	1	0·24		
3	Sandoway ...	4,070	1	0·25	11	2·70	3	0·74	...	...	...	...		
PEGU DIVISION.														
4	Rangoon ...	398,967	197	0·49	1,857	4·65	978	2·45	1	0·00	663	1·66		
5	Pegu ...	21,626	12	0·55	23	1·06	31	1·43	...	...	47	2·17		
6	Nyaunglebin ...	7,790	...	...	...	...	...	...	...	...	...	...		
7	Tharrawaddy ...	7,131	2	0·28	5	0·70	12	1·68	1	0·14	...	...		
8	Thônze ...	7,962	3	0·38	11	1·38	...	...	...	...	17	2·14		
9	Zigôn ...	6,365	1	0·16	8	1·26	14	2·20	...	...	...	...		
10	Letpadan ...	12,160	14	1·15	4	0·33	12	0·98	...	...	1	0·08		
11	Gyobingauk ...	7,675	2	0·26	3	0·39	...	...	...	...	4	0·52		
12	Minhla ...	4,413	...	...	3	0·68	2	0·45	...	...	4	0·91		
13	Nattalin ...	5,633	...	...	6	1·07	1	0·18	...	...	3	0·53		
14	Syriam ...	15,070	1	0·07	106	7·03	...	...	...	...	2	0·13		
15	Thôngwa ...	8,976	...	...	...	...	...	...	...	...	...	...		
16	Insein ...	20,487	8	0·39	31	1·51	30	1·46	...	...	11	0·54		
17	Thamaing ...	5,645	...	...	1	0·18	10	1·77	...	...	...	...		
18	Kamayut ...	7,256	...	...	5	0·69	...	...	...	...	1	0·14		
19	Thingangyun ...	7,984	...	...	...	...	3	0·38	...	...	3	0·38		
20	Kanbè ...	6,575	...	...	...	...	...	...	...	...	4	0·61		
21	Prome ...	28,295	...	...	...	...	...	...	...	...	...	...		
22	Shwedaung ...	8,408	...	...	...	...	...	...	...	...	...	...		
23	Paungdè ...	13,479	...	...	...	...	...	...	...	...	...	...		
24	Toungoo ...	23,223	...	...	13	0·56	18	0·77	...	...	9	0·39		
25	Shwegyin ...	5,876	...	...	...	...	...	...	...	...	...	...		
26	Pyu ...	7,807	10	1·28	22	2·82	20	2·56	...	...	6	0·77		
IRRAWADDY DIVISION.														
27	Bassein ...	45,662	36	0·79	229	5·02	156	3·42	...	...	33	0·72		
28	Ngathainggyaung ...	5,380	...	...	...	...	...	...	...	...	...	...		
29	Kyônpyaw ...	5,866	...	...	...	...	...	...	...	...	...	...		
30	Henzada ...	28,542	...	...	...	...	...	...	...	...	...	...		
31	Myanaung ...	9,072	...	...	...	...	...	...	...	...	...	...		
32	Kyangin ...	6,780	1	0·15	6	0·88	10	1·47	...	...	1	0·15		
33	Mvaungmya ...	7,933	5	0·63	34	1·29	41	5·17	...	...	...	...		
34	Wakema ...	9,359	1	0·11	2	0·21	18	1·92	...	...	5	0·53		
35	Moulmeingyun ...	7,747	3	0·39	2	0·26	33	4·26	...	...	...	...		
36	Maubin ...	8,897	...	...	...	...	...	...	...	...	16	1·80		
37	Yandoon ...	9,925	...	...	...	...	...	...	...	...	...	...		
38	Danubyu ...	6,334	3	0·47	19	3·00	10	1·58	...	...	4	0·63		
39	Pyapôn ...	12,338	9	0·73	13	1·05	25	2·03	...	...	3	0·24		
40	Kyaiklat ...	10,658	6	0·56	43	4·03	32	3·00	...	...	2	0·19		
TENASSERIM DIVISION.														
41	Thatôn ...	16,851	24	1·42	26	1·54	17	1·01	...	...	10	0·59		
42	Kyaikto ...	6,611	...	...	...	...	...	...	...	...	...	...		
43	Moulmein ...	65,506	40	0·61	164	2·50	128	1·95	...	...	106	1·62		
44	Kawka-reik ...	6,575	...	...	...	...	...	...	...	...	...	...		

[illegible]



STATEMENT II-B (a).—*Supplement to*

[illegible]

Annual Statement VI-B, 1948—contd.

Fevers.												Dysentery and	
6		7		8		9		10		11		12	
Influenza.		Cerebrospinal Fever.		Typhus Fever.		Blackwater Fever.		Other Fevers.		Total Fevers.		Dysentery.	
Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
...	...	...	...	...	...	...	...	245	8.44	326	11.23	2	0.07
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	1	0.11	...	...	20	2.16	34	3.66	...	...
...	...	...	...	...	...	...	...	3	0.24	35	2.80	4	0.32
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	5	0.75	46	6.91	1	0.15
...	...	...	...	...	...	...	...	6	0.73	16	1.95	...	...
...	...	...	...	...	...	...	...	3	0.36	75	8.99	13	1.56
...	...	4	0.36	...	...	...	...	18	1.62	67	6.04	22	1.98
...	...	...	...	...	...	...	...	68	5.30	72	5.61	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	0.00	8	0.06	1	0.00	2	0.01	363	2.69	648	4.80	38	0.28
...	...	1	0.06	1	0.06	...	...	5	0.30	42	2.53	5	0.30
...	...	...	...	...	...	...	...	...	...	3	0.53	...	...
...	...	...	...	...	...	...	...	29	3.94	31	4.21	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	2	0.08	11	0.43	32	1.26
...	...	...	...	...	...	...	...	8	0.98	9	1.11	4	0.49
...	...	2	0.21	...	...	...	...	2	0.21	17	1.83	...	...
...	...	...	...	...	...	...	...	13	0.74	44	2.49	9	0.51
...	...	1	0.17	1	0.17	...	...	10	1.73	27	4.67	3	0.52
...	...	...	...	...	...	...	...	34	3.01	54	4.78	1	0.09
...	...	...	...	...	...	...	...	25	6.69	27	7.22	3	0.80
...	...	...	...	...	...	...	...	22	1.56	58	4.11	5	0.35
...	...	...	...	...	...	...	...	17	3.35	21	4.14	1	0.20
...	...	1	0.09	...	...	...	...	30	2.78	89	8.24	14	1.30
2	0.00	20	0.02	8	0.01	2	0.00	1,876	1.58	4,126	3.49	800	0.68
...	...	...	...	3	0.37	...	...	8	1.00	37	4.62	4	0.50
...	...	...	...	2	0.82	...	...	18	2.46	63	8.60	4	0.54
...	...	...	...	...	...	...	...	1	0.44	13	5.71	...	...
...	...	...	...	...	...	...	...	3	0.65	65	14.01	2	0.43
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	1	0.28	...	...	2	0.55	3	0.83	...	...

STATEMENT II-B (a).—*Supplement to*

No.	Divisions and Towns.	Population (Census 1931).	Diarrhoea.		Rspiratory Diseases.									
			13		14		15		16		17			
			Diarrhoea.		Pneumonia.		Pulmonary Tuberculosis.		Whooping cough.		Other Respiratory Diseases.			
			Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio		
TENASSERIM DIVISION —concl'd.														
45	Tavoy ...	29,018	...	...	1	0·03	27	0·93	...	...	7	0·24		
46	Mergui ...	20,405	...	...	...	...	...	...	...	...	...	...		
MAGWE DIVISION.														
47	Thayetmyo ...	9,279	1	0·11	4	0·43	...	...	...	...	2	0·22		
48	Allanmyo ...	12,511	6	0·48	13	1·04	8	0·64	...	...	36	2·88		
49	Minbu ...	6,005	...	...	...	...	...	...	...	...	...	...		
50	Salin ...	6,654	7	1·05	19	2·86	9	1·35	...	...	7	1·05		
51	Magwe ...	8,209	13	1·58	26	3·17	4	0·49	...	...	18	2·19		
52	Taungdwingyi ...	8,339	4	0·48	91	10·91	17	2·04	...	...	3	0·36		
53	Yenangyaung ...	11,098	10	0·90	56	5·04	...	...	...	...	20	1·80		
54	Chauk ...	12,830	...	...	2	0·16	...	...	...	...	5	0·39		
55	Pakôkku ...	23,115	...	...	...	...	...	...	...	...	...	...		
MANDALAY DIVISION.														
56	Mandalay ...	134,950	132	0·98	449	3·33	196	1·45	..	...	413	3·06		
57	Maymyo ...	16,586	13	0·78	83	5·00	23	1·39	...	...	14	0·84		
58	Myitngè ...	5,682	...	...	3	0·53	2	0·35	...	...	...	...		
59	Kyauksè ...	7,353	...	...	3	0·41	4	0·54	2	0·27	2	0·27		
60	Meiktila ...	8,830	...	...	...	...	...	...	...	...	...	...		
61	Myingyan ...	25,457	7	0·27	21	0·82	9	0·35	...	...	125	4·91		
62	Nyaung-U ...	8,118	1	0·12	4	0·49	8	0·98	...	...	1	0·12		
63	Yaméthin ...	9,291	1	0·11	17	1·83	9	0·97	...	...	5	0·54		
64	Pyinmana ...	17,656	13	0·74	31	1·76	12	0·68	...	...	8	0·45		
65	Pyawbwè ...	5,783	...	...	5	0·86	3	0·52	...	...	1	0·17		
SAGAING DIVISION.														
66	Shwebo ...	11,286	3	0·27	5	0·44	1	0·09	...	...	9	0·80		
67	Ye-u ...	3,739	1	0·27	2	0·53	...	...	...	...	3	0·80		
68	Sagaing ...	14,127	4	0·38	44	3·11	1	0·07	...	...	20	1·42		
69	Myinmu ...	5,072	2	0·39	9	1·77	7	1·38	...	...	1	0·20		
70	Mônýwa ...	10,800	8	0·74	98	9·07	9	0·83	...	...	44	4·07		
Total ...		1,387,428	615	0·52	3,667	3·10	1,974	1·67	4	0·00	1,710	1·44		
1	Bhamo ...	8,011	3	0·37	14	1·75	5	0·62	...	...	2	0·25		
2	Myitkyina ...	7,321	3	0·41	15	0·24	28	3·82	...	...	8	1·09		
3	Mawlaik ...	2,278	...	...	2	0·88	2	0·88	...	...	1	0·44		
4	Lashio ...	4,638	6	1·29	8	1·72	15	3·23	1	0·22	4	0·86		
5	Taunggyi ...	8,658	...	...	...	...	...	...	...	...	...	...		
6	Kalaw ...	3,622	1	0·28	3	0·83	5	1·38	...	...	1	0·28		



## Annual Statement VI-B, 1948—contd.

[illegible]



STATEMENT II-B (a).—*Supplement to Annual Statement VI-B, 1948—concl'd.*

No.	Divisions and Towns.	Population (Census 1931).	Other Causes.								Infantile mortality rate per 1,000 births.
			25		26		27	28			
			Leprosy.		Cancer.			Deaths under one year.			
			Death.	Ratio.	Death.	Ratio.		Male.	Female.	Total.	
TENASSERIM DIVISION —concl'd.											
45	Tavoy ...	29,018	...	...	1	0·03	8	25	16	41	61·28
46	Mergui ...	20,405	...	...	...	...	...	...	...	...	...
MAGWE DIVISION.											
47	Thayetmyo ...	9,279	...	...	...	...	1	78	37	115	445·73
48	Allanmyo ...	12,511	1	0·08	4	0·32	6	41	21	62	170·79
49	Minbu ...	6,005	...	...	...	...	...	...	...	...	...
50	Salin ...	6,654	1	0·15	3	0·45	1	36	29	64	299·06
51	Magwe ...	8,209	2	0·24	...	...	1	45	25	70	334·92
52	Taungdwingyi ...	8,339	3	0·36	1	0·12	3	79	71	150	366·74
53	Yenangyaung ...	11,098	2	0·18	...	...	3	66	58	124	268·39
54	Chauk ...	12,830	...	...	...	...	3	24	27	51	359·15
55	Pakôkku ...	23,115	...	...	...	...	...	...	...	...	...
MANDALAY DIVISION.											
56	Mandalay ...	134,950	23	0·17	15	0·11	41	1,108	1,070	2,178	342·99
57	Maymyo ...	16,586	2	0·12	5	0·30	9	77	61	138	141·10
58	Myitngè ...	5,682	...	...	...	...	...	5	1	6	45·80
59	Kyauksè ...	7,353	...	...	...	...	3	26	21	47	214·61
60	Meiktila ...	8,830	...	...	...	...	...	...	...	...	...
61	Myingyan ...	25,457	10	0·39	2	0·08	10	177	152	329	361·93
62	Nyaung-U ...	8,118	3	0·37	...	...	2	19	26	45	231·95
63	Yamèthin ...	9,291	3	0·32	...	...	1	31	13	44	260·35
64	Pyinmana ...	17,656	2	0·11	...	...	12	80	72	152	302·18
65	Pyawbwè ...	5,783	2	0·34	...	...	3	21	27	48	203·38
SAGAING DIVISION.											
66	Shwebo ...	11,286	3	0·27	...	...	1	45	40	85	187·63
67	Ye-u ...	3,739	4	1·07	2	0·53	...	24	16	40	233·91
68	Sagaing ...	14,127	4	0·28	1	0·07	7	79	65	144	334·88
69	Myinmu ...	5,072	3	0·59	1	0·20	1	22	22	44	241·75
70	Mònywa ...	10,800	1	0·09	...	...	9	115	106	221	470·21
Total ...		1,387,428	185	0·16	221	0·19	390	6,393	5,350	11,743	266·79
1	Bhamo ...	8,011	...	...	...	...	5	16	14	30	142·18
2	Myitkyina ...	7,328	...	...	...	...	3	28	17	45	164·83
3	Mawlaik ...	2,278	...	...	1	0·44	2	3	6	9	121·62
4	Lashio ...	4,638	...	...	1	0·22	3	12	10	22	90·53
5	Taunggyi ...	8,652	...	...	...	...	...	...	...	...	...
6	Kalaw ...	3,621	...	...	...	...	...	...	1	1	5·91



STATEMENT NO. I (a).—*Showing particulars of Rural*

No.	Divisions and Districts.	Population of Districts according to Census of 1931.	Average number of Vaccinators employed throughout the year.	Total number of persons	
				Male.	Female.
(1)	(2)	(3)	(4)	(5)	(6)
	ARAKAN DIVISION.				
1	Akyab ... ..	597,242	11	28,473	24,769
2	Arakan Hill Tracts ...	21,418	3	3,018	1,462
3	Kyaukpyu ... ..	216,060	6	5,250	4,515
4	Sandoway ... ..	125,175	3	1,944	1,626
	PEGU DIVISION.				
5	Pegu ... ..	460,395	8	8,019	9,196
6	Tharrawaddy ... ..	454,471	10	24,639	27,355
7	Hanthawaddy ... ..	384,785	8	13,740	14,968
8	Insein ... ..	279,595	5	11,433	14,313
9	Prome ... ..	...	...	...	...
10	Toungoo ... ..	...	...	...	...
	IRRAWADDY DIVISION.				
11	Bassein ... ..	514,135	12	30,709	33,210
12	Henzada ... ..	571,395	12	14,814	21,726
13	Myaungmya ... ..	419,905	12	33,860	35,679
14	Maubin ... ..	...	...	...	...
15	Pyapôn ... ..	311,162	8	11,848	14,368
	TENASSERIM DIVISION.				
16	Salween ... ..	53,186	4	4,847	3,315
17	Thatôn * ... ..	509,166	12	28,333	30,258
18	Amherst ... ..	444,152	8	46,944	47,131
19	Tavoy ... ..	150,946	5	10,281	11,092
20	Mergui ... ..	141,582	5	13,050	12,675

## NATION.

*Vaccination of Burma during the year 1948.*

vaccinated.		Primary vaccination.					No.
Total.	Average number of persons vaccinated by each Vaccinator.	Total.	Successful.			Unknown.	
			Under one year.	One and under six years.	Total of all ages.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(1)
53,242	4,840	16,306	2,560	7,160	10,548	5,547	1
4,480	1,493	1,259	20	585	1,088	171	2
9,765	1,627	3,736	697	1,255	2,837	389	3
3,570	1,190	1,920	94	627	1,228	351	4
17,215	2,152	9,645	2,563	5,459	9,021	517	5
51,994	5,199	23 043	5,173	8,781	14,645	7 897	6
28,703	3,586	9,393	1,819	4,519	7,781	1,111	7
25,746	5,149	7,454	2,367	3,759	6,763	317	8
...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	10
63,919	5,326	20,893	2,307	6,243	10,894	8,172	11
36,540	3,045	23,397	8,178	10,532	18,710	3,874	12
69,539	5,795	34,449	7,001	20,343	33,304	1,145	13
...	...	...	...	...	...	...	14
26,216	3,277	14,924	2,888	7,053	13,695	884	15
8,162	2,040	3,853	61	743	1,849	1,853	16
58,591	4,883	24,116	4,232	9,530	16,996	2,325	17
94,075	11,759	26,933	3,503	11,501	19,191	5,418	18
21,373	4,275	8,249	2,883	3,816	6,699	...	19
25,725	5,145	7,950	728	3,940	5,977	958	20

STATEMENT NO. I (a).—*Showing particulars of Rural*

No.	Divisions and Districts.	Re-vaccination,			Percentage of in which the
		Total.	Successful.	Unknown.	Primary.
(1)	(2)	(14)	(15)	(16)	(17)
	ARAKAN DIVISION.				
1	Akyab ... ..	36,936	1,325	15,380	98·03
2	Arakan Hill Tracts ... ..	3,221	892	688	100·00
3	Kyaukp'y'u ... ..	6,029	1,441	875	84·76
4	Sandoway ... ..	1,650	85	366	78·97
	PEGU DIVISION.				
5	Pegu ... ..	7,570	704	1,530	98·82
6	Tharrawaddy ... ..	28,951	5,787	14,496	96·69
7	Hanthawaddy ... ..	19,315	3,852	4,186	93·95
8	Insein ... ..	18,292	3,927	1,156	94·76
9	Prome ... ..	...	...	...	...
10	Toungoo ... ..	...	...	...	...
	IRRAWADDY DIVISION.				
11	Bassein ... ..	43,026	5,516	19,864	85·63
12	Henzada ... ..	13,143	126	5,386	95·83
13	Myaungmya ... ..	35,090	6,893	4,057	100·00
14	Maubin ... ..	...	...	...	...
15	Pyapôn ... ..	11,292	1,364	2,282	97·54
	TENASSERIM DIVISION.				
16	Salween ... ..	4,039	713	2,014	92·45
17	Thatôn ... ..	34,475	6,165	6,229	77·99
18	Amherst ... ..	67,142	4,734	12,934	89·19
19	Tavoy ... ..	13,124	5,528	1,597	81·21
20	Mergui * ... ..	17,775	3,575	6,714	85·48



## NATION.

*Vaccination of Burma during the year 1948—contd.*

successful cases results were known					
Re-vaccination.	Persons success- fully vaccinated per 1,000 of population.	Total cost of Vaccina- tion Department.	Number of all successful vaccinations and re-vaccinations performed by the Vaccination Staff only.	Average cost of each successful case performed by the Vaccination Staff.	No.
(18)	(19)	(20)	(21)	(22)	(1)
		Rs. A. P.	Rs.	Rs. A. P.	
6 14	19'88	24,238 8 0	11,873	1 15 8	1
35'21	...	3,181 7 0	1,980	...	2
27'95	19'79	14,089 15 0	4,278	1 0 0	3
6'61	10'48	8,787 12 0	1,313	6 11 0	4
11'65	21'12	14,686 7 0	9,725	2 3 8	5
40'03	44'95	15,497 6 0	20,432	0 12 1	6
25'46	30'23	26,655 6 0	11,633	2 0 1	7
22'91	38'23	19,935 3 0	10,690	0 15 0	8
...	...	...	...	...	9
...	...	...	...	...	10
23'81	31'91	35 951 7 0	16,410	2 4 0	11
1 62	32'96	25,121 6 0	18,836	1 5 3	12
22'00	95'72	16,444 10 0	40,197	0 6 7	13
...	...	...	...	...	14
15'02	48'39	25,337 12 0	15,059	1 10 11	15
31'06	48'17	9,088 2 0	2,562	3 8 9	16
21'82	45'48	23,235 0 0	23,161	0 14 4	17
8'73	53'86	20,242 3 0	23,925	0 13 6	18
47'95	81'00	13,630 5 0	12,227	1 1 9	19
32'32	67'47	7,633 0 0	9,552	0 12 9	20

## VACCI

STATEMENT NO. I (a).—*Showing particulars of Rural*

No.	Divisions and Districts.	Population of Districts according to Census of 1931.	Average number of Vaccinators employed throughout the year.	Total number of persons	
				Male.	Female.
(1)	(2)	(3)	(4)	(5)	(6)
MAGWE DIVISION.					
21	Thayetmyo ...	...	...	...	...
22	Minbu ...	...	...	...	...
23	Magwe ...	...	...	...	...
24	Pakòkku ...	...	...	...	...
25	Chin Hills ...	...	...	...	...
MANDALAY DIVISION.					
26	Mandalay ...	196,687	4	9,106	10,606
27	Kyauksè ...	143,967	4	6,309	7,867
28	Meiktila ...	...	...	...	...
29	Myingyan ...	...	...	...	...
30	Yamèthin ...	358,090	5	17,446	20,112
SAGAING DIVISION.					
31	Bhamo ...	113,182	6	4,094	4,094
32	Myitkyina ...	...	7	7,442	7,644
33	Shwebo ...	431,765	10	24,391	28,440
34	Sagaing ...	316,766	6	15,590	16,939
35	Katha } ...	...	7	13,634	13,183
	Mogòk { ...	...	1	1,583	1,527
36	Upper Chindwin ...	202,704	7	9,936	11,878
37	Lower Chindwin ...	372,634	7	21,375	25,814
	Total ...	7,850,913	196	422,108	455,762
FEDERATED SHAN STATES.					
38	Northern Shan States ...	631,469	24	20,079	21,384
39	Southern Shan States ...	916,718	20	33,865	32,614

## NATION.

*Vaccinations of Burma during the year 1948—contd.*

vaccinated.		Primary vaccination.					No.
Total.	Average number of persons vaccinated by each Vaccinator.	Total.	Successful.			Unknown.	
			Under one year,	One and under six years.	Total of all ages		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(1)
...	...	...	...	...	...	...	21
...	...	...	...	...	...	...	22
...	...	...	...	...	...	...	23
...	...	...	...	...	...	...	24
...	...	...	...	...	...	...	25
19,712	4,928	6,086	1,093	1,382	3,040	2,563	26
14,176	3,544	3,841	609	1,642	2,251	1,173	27
...	...	...	...	...	...	...	28
...	...	...	...	...	...	...	29
37,558	7,512	13,724	1,370	4,729	6,795	5,091	30
8,188	1,364	* 6,597	292	684	1,741	2,931	31
15,086	2,157	7,281	342	1,075	1,838	4,013	32
52,831	5,283	18,551	2,574	8,404	12,517	3,476	33
32,529	5,421	9,660	864	4,792	5,656	2,923	34
26,817	3,741	10,069	919	2,443	4,319	4,639	35
3,110		* 1,328	221	749	1,150	...	247
21,814		10,158	1,505	4,368	6,299	...	
47,189	6,741	* 11,232	1,456	4,023	5,526	3,185	37
877,870	44,789	336,047	58,319	140,137	232,358	71,170	
41,463	1,728	16,149	2,997	6,061	13,353	1,350	38
66,479	3,524	26,690	2,158	12,501	17,614	8,376	39

tional included.



STATEMENT NO. I (a).—*Showing particulars of Rural*

No.	Divisions and Districts.		Re-vaccination.			Percentage of in which the
			Total.	Successful.	Unknown.	Primary.
(1)	(2)		(14)	(15)	(16)	(17)
	MAGWE DIVISION.					
21	Thayetmyo	...	...	...	...	...
22	Minbu	...	...	...	...	...
23	Magwe	...	...	...	...	...
24	Pakôkku	...	...	...	...	...
25	Chin Hills	...	...	...	...	...
	MANDALAY DIVISION.					
26	Mandalay	...	13,626	1,050	6,199	86·29
27	Kyauksè	...	10,335	1,128	3,954	84·34
28	Meiktila	...	...	...	...	...
29	Myingyan	...	...	...	...	...
30	Yamèthin	...	23,834	1,638	10,992	78·70
	SAGAING DIVISION.					
31	Bhamo	...	5,589	443	2,355	47·49
32	Myitkyina	...	7,805	902	3,709	56·24
33	Shwebo	...	34,280	7,122	12,377	83·02
34	Sagaing	...	22,869	1,455	8,982	83·95
35	Katha	...	16,748	2,446	8,355	79·54
	Môgok	...	1,792	171	...	36·59
36	Upper Chindwin	...	11,656	1,185	228	63·55
37	Lower Chindwin	...	35,966	3,857	14,747	68·67
	Total	...	545,840	74,024	163,553	69·14
	FEDERATED SHAN STATES.					
38	Northern Shan States	...	25,314	8,559	3,060	90·22
39	Southern Shan States	...	39,789	5,405	93,022	96·17

## NATION.

*Vaccinations of Burma during the year 1948—concl'd.*

successful cases results were known.					
Re-vaccination.	Persons success- fully vaccinated per 1,000 of population.	Total cost of Vaccina- tion Department.	Number of all successful vaccinations and re-vaccinations performed by the Vaccination Staff only.	Average cost of each successful case performed by the Vaccination Staff.	No.
(18)	(19)	(20)	(21)	(22)	(1)
		Rs. A. P.		Rs. A. P.	
...	...	...	...	...	21
...	...	...	...	...	22
...	...	...	...	...	23
...	...	...	...	...	24
...	...	...	...	...	25
14'14	20'79	8,860 12 0	4,090	1 7 0	26
17'67	23'47	8,431 12 0	3,379	2 7 11	27
...	...	...	...	..	28
...	...	...	...	...	29
12'75	23'54	8,155 1 0	8,433	0 15 5	30
13'69	19'29	13,675 15 0	2,184	6 4 2	31
22'02	16'64	...	2,740	...	32
32'36	45'48	21,762 11 0	19,639	1 1 9	33
10'47	22'44	16,319 4 0	7,111	2 6 1	34
33'09	31'81	16,118 9 0	6,765	} 2 6 0	35
9'54	...	4,518 9 0	11,321		36
10'36	36'92	15,603 2 0	7,484		37
18'17	25'17	22,254 5 0	9,383	2 5 11	37
13'65	39'024	4,39,255 13 0	305,958	...	
38'46	34'68	30,936 10 0	21,912	1 6 7	38
13'83	25'10	80,265 7 0	23,019	5 6 0	39

## STATEMENT NO. I (b).--Showing particulars of Urban Vaccinations

No.	Divisions and Towns.	Population of towns according to Census of 1931.	Average number of Vaccinators employed throughout the year.	Total number of persons	
				Male.	Female.
(1)	(2)	(3)	(4)	(5)	(6)
ARAKAN DIVISION.					
1	Akyab ... ..	38,094	2	15,959	5,735
2	Kyaukpyu ... ..	4,232	1	138	102
3	Sandoway ... ..	4,070	1	296	272
PEGU DIVISION.					
4	Rangoon ... ..	398,967	20	149,000	93,216
5	Pegu ... ..	...	...	...	...
6	Nyaunglebin ... ..	...	...	...	...
7	Tharrawaddy ... ..	7,131	1	865	689
8	Thônzè ... ..	7,962	1	656	611
9	Zigôn ... ..	6,365	1	809	864
10	Letpadan ... ..	12,160	1	726	704
11	Gyobingauk ... ..	7,675	1	734	716
12	Minhla ... ..	4,413	1	587	393
13	Nattalin ... ..	5,633	1	645	595
14	Syriam ... ..	...	...	10,461	2,343
15	Thôngwa ... ..	...	...	...	...
16	Insein ... ..	20,487	1	2,747	2,433
17	Thamaing ... ..	5,645	1 {	1,293	1,155
18	Kamayut ... ..	7,256		1,697	1,467
19	Thingangyun ... ..	7,984	1 {	1,326	1,536
20	Kanbè ... ..	6,575		1,430	1,432
21	Prome ... ..	...	...	...	...
22	Swedaung ... ..	...	...	...	...
23	Paungde ... ..	...	...	...	...
24	Toungoo ... ..	...	...	...	...
25	Shwegyin ... ..	...	...	...	...
26	Pyu ... ..	...	...	...	...
IRRAWADDY DIVISION					
27	Bassein ... ..	45,662	2	8,065	7,453
28	Ngathainggyaung ... ..	...	...	...	...
29	Kyônpyaw ... ..	...	...	...	...



## NATION.

(excluding Jails and Ports) of Burma during the year 1948.

vaccinated.	Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				No.
Total.		Total.	Successful.			
			Under one year.	One and under six years.	Total of all ages.	
(7)	(8)	(9)	(10)	(11)	(12)	(1)
21,694	10,847	1,871	448	963	1,606	1
240	240	94	22	40	66	2
568	568	* 285	78	109	219	3
242,216	12,111	24,586	14,669	7,430	22,573	4
...	...	...	...	...	...	5
...	...	...	...	...	...	6
1,554	1,554	224	71	153	224	7
1,267	1,267	253	76	177	253	8
1,673	1,673	530	176	90	266	9
1,520	1,520	674	170	48	651	10
1,450	1,450	350	121	158	279	11
980	980	186	126	60	186	12
1,240	1,240	354	108	246	275	13
12,804	...	559	290	208	504	14
...	...	...	...	...	...	15
5,180	5,180	918	400	472	872	16
2,448	2,448	288	92	162	256	17
3,164	3,164	418	204	174	379	18
2,862	2,862	164	86	40	126	19
2,862	2,862	150	85	39	124	20
...	...	...	...	...	...	21
...	...	...	...	...	...	22
...	...	...	...	...	...	23
...	...	...	...	...	...	24
...	...	...	...	...	...	25
...	...	...	...	...	...	26
15,518	7,759	3,711	1,174	4,411	1,915	27
...	...	...	...	...	...	28
...	...	...	...	...	...	29

Report not received.

## STATEMENT NO. I (b).—Showing particulars of Urban Vaccinations

No.	Divisions and Towns.		Primary Vaccination.	Re-vaccination.		
			Unknown.	Total.	Successful.	Unknown.
(1)	(2)		(13)	(14)	(15)	(16)
	ARAKAN DIVISION— <i>concl'd.</i>					
1	Akyab	...	107	19,823	799	7,750
2	Kyaukpyu	...	11	146	41	47
3	Sandoway	...	6	288	19	1
	PEGU DIVISION— <i>concl'd.</i>					
4	Rangoon	...	1,781	217,630	17,333	62,168
5	Pegu	...	...	...	...	...
6	Nyaunglebin	...	...	...	...	...
7	Tharrawaddy	...	...	1,330	250	41
8	Thônzè	...	...	1,014	73	157
9	Zigôn	...	221	1,143	254	423
10	Letpadan	...	23	846	257	176
11	Gyobingauk	...	3	1,100	49	...
12	Minhla	...	...	794	184	52
13	Nattalin	...	...	886	181	...
14	Syriam	...	8	12,245	335	2,692
15	Thôngwa	...	...	...	...	...
16	Insein	...	40	4,262	910	1,087
17	Thamaing	...	22	2,160	180	329
18	Kamayut	...	22	2,746	241	411
19	Thingangyun	...	13	2,698	195	104
20	Kanbè	...	15	2,712	185	136
21	Prome	...	...	...	...	...
22	Shwedaung	...	...	...	...	...
23	Paungdè	...	...	...	...	...
24	Toungoo	...	...	...	...	...
25	Shwegyin	...	...	...	...	...
26	Pyu	...	...	...	...	...
	IRRAWADDY DIVISION— <i>cont'd.</i>					
27	Bassein	...	1,797	11,807	1,643	4,310
28	Ngathainggyaung	...	...	...	...	...
29	Kyônpyaw	...	...	...	...	...

## NATION.

(excluding Jails and Ports) of Burma during the year 1948—contd.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the Vaccination Staff only.	Average cost of each successful case performed by the Vaccination Staff.	No.
Primary.	Re-vaccination.					
(17)	(18)	(19)	(20)	(21)	(22)	(1)
			Rs. A. P.		Rs. A. P.	
91·04	6·62	63·13	6,993 10 0	2,405	2 14 6	1
79·52	41·41	25·28	2,042 0 0	107	9 11 9	2
78·49	6·62	58·48	2,163 5 0	238	9 1 5	3
98·98	11·14	100·00	83,445 11 0	39,906	2 1 5	4
...	...	...	...	...	...	5
...	...	...	...	...	...	6
100·00	19·39	66·47	1,642 13 0	474	3 7 5	7
100·00	8·52	40·94	1,715 0 0	326	5 4 2	8
86·08	35·28	81·70	2,268 10 0	520	4 5 9	9
100·00	38·36	74·67	1,364 0 0	908	1 8 0	10
80·40	4·45	42·74	1,495 0 0	328	4 8 11	11
100·00	24·79	83·84	1,864 0 0	370	5 0 7	12
77·68	20·43	80·95	2,578 8 0	456	5 10 5	13
91·47	3·51	55·67	3,483 10 0	839	4 2 5	14
...	...	...	...	...	...	15
99·32	28·66	86·98	3,312 6 0	1,782	1 13 9	16
96·24	9·83	77·24	2,482 0 0	436	5 11 1	17
85·45	10·32	85·45	4,251 0 0	620	6 13 8	18
83·44	7·52	40·21	2,878 10 0	321	8 15 6	19
91·85	7·18	47·00	2,439 0 0	309	7 14 3	20
...	...	...	...	...	...	21
...	...	...	...	...	...	22
...	...	...	...	...	...	23
...	...	...	...	...	...	24
...	...	...	...	...	...	25
...	...	...	...	...	...	26
100·00	0·21	...	4,918 14	3,558	1 6 0	27
...	...	...	...	...	...	28
...	...	...	...	...	...	29

Report not received.



STATEMENT NO. I (b).—*Showing particulars of Urban Vaccinations*

No.	Divisions and Towns.	Population of towns according to Census of 1931.	Average number of Vaccinators employed throughout the year.	Total number of persons	
				Male.	Female.
(1)	(2)	(3)	(4)	(5)	(6)
IRRAWADDY DIVISION— <i>concl'd.</i>					
30	Henzada ... ..	28,542	2	3,094	2,346
31	Myanaung ... ..	...	...	...	...
32	Kyangin ... ..	...	...	...	...
33	Myaungmya ... ..	7,773	2	2,215	2,070
34	Wakèma ... ..	9,359	1	1,136	1,463
35	Moulmeingyun ... ..	7,747	1	1,631	1,685
36	Maubin ... ..	8,897	1	1,830	1,830
37	Yandoon ... ..	...	...	...	...
38	Danubyu ... ..	6,334	1	745	581
39	Pyapôn ... ..	12,338	1	939	764
40	Kyaiklat ... ..	10,658	1	772	708
TENASSERIM DIVISION.					
41	Thatôn ... ..	16,851	1	1,187	647
42	Kyaikto ... ..	...	...	...	...
43	Moulmein ... ..	65,506	3	16,976	13,730
44	Kawkareik ... ..	...	...	...	...
45	Tavoy ... ..	29,018	2	1,876	2,319
46	Mergui ... ..	20,405	1	3,517	2,465
MAGWE DIVISION.					
47	Thayetmyo ... ..	...	...	...	...
48	Allanmyo ... ..	12,511	1	1,440	1,267
49	Minbu ... ..	...	...	...	...
50	Salin ... ..	6,654	...	765	915
51	Magwe ... ..	...	...	...	...
52	Taungdwingyi ... ..	...	...	...	...
53	Yenangyaung ... ..	11,098	1	2,281	1,748
54	Chauk ... ..	12,830	1	625	605
55	Pakôkku ... ..	...	...	...	...

\* Annual Vaccination

## NATION.

(excluding Jails and Ports) of Burma during the year 1948—contd.

vaccinated.	Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				No.
Total		Total.	Successful.			
			Under one year.	One and under six years.	Total of all ages.	
(7)	(8)	(9)	(10)	(11)	(12)	(1)
5,440	2,720	1,304	811	493	1,304	30
...	...	...	...	...	...	31
...	...	...	...	...	...	32
4,285	2,142	1,235	380	679	1,180	33
2,599	2,599	557	91	286	459	34
3,316	3,316	1,771	220	906	1,546	35
3,660	3,660	431	385	46	431	36
...	...	...	...	...	...	37
1,326	1,326	255	43	121	234	38
1,703	1,703	892	450	245	742	39
1,480	1,480	362	136	193	341	40
1,834	1,834	839	489	111	606	41
...	...	...	...	...	...	42
30,706	10,285	2,346	1,108	954	2,320	43
...	...	...	...	...	...	44
4,195	2,197	1,338	961	271	1,232	45
5,982	5,982	2,031	494	601	1,616	46
...	...	...	...	...	...	47
2,707	2,707	970	102	517	679	48
...	...	...	...	...	...	49
1,680	...	281	178	101	279	50
...	...	...	...	...	...	51
...	...	...	...	...	...	52
4,029	4,029	979	380	591	971	53
1,230	1,230	615	205	284	491	54
...	...	...	...	...	...	55

Report not received.

STATEMENT NO. I (b).—Showing particulars of Urban Vaccinations

No.	Divisions and Towns.	Primary Vaccination.	Re-vaccination.		
		Unknown.	Total.	Successful.	Unknown.
(1)	(2)	(13)	(14)	(15)	(16)
IRRAWADDY DIVISION—concl'd.					
30	Henzada ... ..	...	4,136	64	...
31	Myanaung ... ..	...	...	...	...
32	Kyangin ... ..	...	...	...	...
33	Myaungmya ... ..	55	3,050	498	697
34	Wakèma ... ..	98	2,042	101	495
35	Moulmeingyun ... ..	199	1,545	306	505
36	Maubin ... ..	...	3,229	84	1,681
37	Yandoon ... ..	...	...	...	...
38	Danubyu ... ..	21	1,071	40	93
39	Pyapôn ... ..	97	811	45	241
40	Kyaiklat ... ..	21	1,118	...	112
TENASSERIM DIVISION—concl'd.					
41	Thatôn ... ..	123	995	67	564
42	Kyaikto ... ..	...	...	...	...
43	Moulmein ... ..	8	28,360	6,685	1,657
44	Kawkareik ... ..	...	...	...	...
45	Tavoy ... ..	20	2,857	687	240
46	Mergui ... ..	131	3,951	755	419
MAGWE DIVISION—concl'd.					
47	Thayetmyo ... ..	...	...	...	...
48	Allanmyo ... ..	27	1,737	140	53
49	Minbu ... ..	...	...	...	...
50	Salin ... ..	2	1,399	311	74
51	Magwe ... ..	...	...	...	...
52	Taungdwingyi ... ..	...	...	...	...
53	Yenangyaung ... ..	8	3,050	374	424
54	Chauk ... ..	45	615	10	...
55	Pakôkku ... ..	...	...	...	...

\* Annual Vaccination



## NATION.

(excluding Jails and Ports) of Burma during the year 1948—contd.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the Vaccination Staff only.	Average cost of each successful case performed by the Vaccination Staff.	No.
Primary.	Revaccination.					
(17)	(18)	(19)	(20)	(21)	(22)	(1)
			Rs. A. P.		Rs. A. P.	
...	1.54	47.93	2,460 15 8	1,368	1 12 9	30
...	...	...	...	...	...	31
...	...	...	...	...	...	32
100.00	21.16	211.52	1,277 7 0	1,678	0 12 2	33
100.00	6.52	59.84	2,134 1 0	560	3 12 11	34
98.34	29.42	239.06	1,912 13 0	1,852	1 0 1	35
100.00	5.43	57.88	2,372 10 0	515	4 9 8	36
...	...	...	...	...	...	37
100.00	4.09	43.26	2,719 8 4	274	9 14 9	38
93.33	7.89	63.79	2 124 0 0	787	2 11 2	39
100.00	...	31.99	3,299 12 0	341	9 12 0	40
84.14	15.55	39.94	2,056 0 0	673	3 0 9	41
...	...	...	...	...	...	42
99.23	25.03	137.47	12,882 3 0	9,005	1 6 10	43
...	...	...	...	...	...	44
93.47	26.25	66.13	5,535 8 0	1,919	2 14 11	45
85.05	21.37	116.20	2,470 13 8	2,371	1 0 8	46
...	...	...	...	...	...	47
72.00	8.31	65.46	3,680 2 0	819	4 5 11	48
...	...	...	...	...	...	49
100.00	23.47	89.47	581 4 0	590	0 15 9	50
...	...	...	...	...	...	51
...	...	...	...	...	...	52
100.00	14.24	121.19	1,754 3 0	1,345	1 4 10	53
86.14	1.62	39.05	2,260 3 0	501	4 8 0	54
...	...	...	...	...	...	55

Report not received.

STATEMENT NO. I (b).—*Showing particulars of Urban Vaccinations*

No.	Divisions and Towns.			Population of towns according to Census of 1931.	Average number of vaccinators employed throughout the year.	Total number of person	
(1)	(2)			(3)	(4)	(5)	(6)
	MANDALAY DIVISION.					Male.	Female.
56	Mandalay	..	...	134,950	4	26,572	25,049
57	Maymyo	..	...	16,586	1	3,044	2,980
58	Myitngè	..	...	...	...	...	...
59	Kyauksè	..	...	7,353	1	1,019	1,001
60	Meiktila	..	...	...	...	...	...
61	Myingyan	..	...	...	...	...	...
62	Nyaung-U	..	...	...	1	...	...
63	Yanèthin	...	...	9,291	1	1,895	1,801
64	Pyinmana	...	...	...	...	...	...
65	Pyawbwè	...	...	...	...	...	...
	SAGAING DIVISION.						
66	Shwebo	...	...	...	...	...	...
67	Ye-U	...	...	...	...	...	...
68	Sagaing	...	...	14,127	1	1,598	1,070
69	Myinmu	...	...	5,072	1	811	675
70	Mônýwa	...	...	10,800	1	1,917	1,801
71	Bhamo	...	...	8,011	1	1,021	607
72	Myitkyina	...	...	7,328	1	544	412
73	Mawlaik	...	...	2,278	...	213	174
	Total			10,87,698	68	277,097	192,519
	FEDERATED SHAN STATES.						
...	Lashio	...	...	4,638	1	1,166	1,474
...	Taunggyi	...	...	8,652	...	...	...
...	Kalaw	...	...	3,621	1	529	255
	Total			...	2	1,695	1,729

\* Secondary operations

NATION.

(excluding Jails and Ports) of Burma during the year 1948—contd.

vaccinated.	Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				No.
		Total.	Successful.			
			Under one year.	One and under six years.	Total of all ages.	
(7)	(8)	(9)	(10)	(11)	(12)	(1)
Total						
51,621	12,905	* 9,290	4,587	3,101	7,767	56
6,024	6,024	805	391	104	495	57
...	...	...	...	...	...	58
2,020	2,020	690	145	167	342	59
...	...	...	...	...	...	60
...	...	...	...	...	...	61
...	...	...	...	...	...	62
3,696	3,696	449	80	143	276	63
...	...	...	...	...	...	64
...	...	...	...	...	...	65
...	...	...	...	...	...	66
...	...	...	...	...	...	67
2,668	2,668	387	90	282	372	68
1,486	1,486	286	58	228	286	69
3,718	3,718	521	128	202	330	70
1,628	1,628	601	150	215	391	71
956	956	343	91	55	146	72
387	387	94	6	48	54	73
469,616	6,906	65,287	30,555	22,387	55,664	
2,640	2,640	388	156	113	335	...
... 784	... 784	... 213	... 63	... 134	... 213	...
3,424	1,712	601	219	247	548	

included.



STATEMENT NO. I (b).—*Showing particulars of Urban Vaccinations*

No.	Divisions and Towns.			Primary Vaccination.	Re-vaccination.		
				Unknown.	Total.	Successful.	Unknown.
(1)	(2)			(13)	(14)	(15)	(16)
	MANDALAY DIVISION— <i>concl'd.</i>						
56	Mandalay	...	...	301	43,349	4,587	6,003
57	Maymyo	...	...	307	5,219	43	3,202
58	Myitngè	...	...	...	...	...	...
59	Kyauksè	...	...	311	1,330	159	615
60	Meiktila	...	...	...	...	...	...
61	Myingyan	...	...	...	...	...	...
62	Nyaung-U	...	...	...	...	...	...
63	Yamèthin	...	...	96	3,247	309	1,118
64	Pyinmana	...	...	...	...	...	...
65	Pyawbwè	...	...	...	...	...	...
	SAGAING DIVISION— <i>concl'd.</i>						
66	Shwebo	...	...	...	...	...	...
67	Ye-U	...	...	...	...	...	...
68	Sagaing	...	...	11	2,281	240	130
69	Myinmu	...	...	...	1,200	153	195
70	Mònywa	...	...	71	3,197	258	803
71	Bhamo	...	...	53	1,027	98	362
72	Myitkyina	...	...	7	613	168	64
73	Mawlaik	...	...	3	293	27	...
	Total			6,384	405,352	39,338	99,631
	FEDERATED SHAN STATES— <i>concl'd.</i>						
...	Lashio	...	...	25	2,252	757	215
...	Taunggyi	...	...	...	...	...	...
...	Kalaw	...	...	...	571	...	571
	Total			25	2,823	757	786

## NATION.

(excluding Jails and Ports) of Burma during the year 1948—concl'd.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the Vaccination Staff only.	Average cost of each successful case performed by the Vaccination Staff.	No.
Primary.	Re-vaccination.					
(17)	(18)	(19)	(20)	(21)	(22)	(23)
			Rs. A. P.		Rs. A. P.	
86.40	12.28	91.54	22,202 3 0	12,354	1 12 8	56
99.39	2.13	32.44	4,565 10 0	538	8 7 9	57
...	...	...	...	...	...	58
90.23	22.24	68.13	2,024 5 0	501	4 0 8	59
...	...	...	...	...	...	60
...	...	...	...	...	...	61
...	...	...	...	...	...	62
49.91	14.51	62.96	1,486 4 0	585	2 8 7	63
...	...	...	...	...	...	64
...	...	...	...	...	...	65
...	...	...	...	...	...	66
...	...	...	...	...	...	67
98.93	11.15	43.32	2,489 3 0	612	4 1 1	68
100.00	15.22	86.55	12,677 7 0	439	2 14 2	69
73.33	10.77	54.44	3,121 9 0	588	5 4 1	70
71.35	14.73	61.04	2,306 14 0	489	4 11 6	71
43.45	30.60	42.85	1,815 9 0	314	5 12 6	72
59.34	9.21	35.56	508 8 0	81	6 4 2	73
85.26	9.70	87.34	2,21,647 0 8	95,002	2 5 4	
92.28	37.16	243.45	1,590 10 0	1,092	1 7 4	...
100.00	...	58.82	2,066 14 0	213	9 11 2	...
91.18	26.99	158.01	3,657 8 0	1,305	2 12 10	

Table 1. Summary of the results of the analysis of variance for the effect of the treatment on the response of the subjects.

Source of variation		Sum of squares		Degrees of freedom		Mean square		F-value		Probability	
Between groups											
Total											
Within groups											
Error											
Total											
Grand total											
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